

EVIDENTIARY HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Application for Certification for) Docket No.
the Avenal Energy Project) 08-AFC-1
)
_____)

AVENAL SUPERIOR COURT
501 E. KINGS STREET
AVENAL, CALIFORNIA

TUESDAY, JULY 7, 2009

10:00 A.M.

Reported by: Peter Petty, CER**D-493
Transcribed by: Margo D. Hewitt, CET**00480
Contract No. 170-08-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMITTEE MEMBERS PRESENT

Jeffrey D. Byron, Presiding Member

Karen Douglas, Associate Member

HEARING OFFICER AND ADVISERS

Gary Fay, Hearing Officer

Kristy Chew, Adviser

Diana Schwyzer-Manetta, Adviser

STAFF AND CONSULTANTS PRESENT

Lisa DeCarlo, Senior Staff Counsel

Joseph Douglas, Project Manager

Matthew Layton

David Vidaver

Obed Odoemelum

Richard Anderson

Steven McClary
MRW and Associates

Brewster Birdsall
Christopher Meyer
Aspen Environmental Group

Alvin Greenberg

PUBLIC ADVISER

Elena Miller

APPLICANT

Jane E. Luckhardt, Attorney
Downey Brand Attorneys, LLP

APPLICANT

Jim Rexroad, Vice President
Avenal Power Center, LLC

J. Richard Lauckhart
Black and Veatch Corporation

Gary S. Rubenstein
Sierra Research

Joseph Stenger
TRC Solutions

Alan MacKenzie
Fluor Enterprises, Inc.

Monte Meredith
Navigant Consulting

INTERVENORS

Ingrid Brostrom, Attorney
Center on Race, Poverty and Environment

Chip Ashley
Sierra Club, Tehipite Chapter

Rob Simpson

ALSO PRESENT

Gabriela Torres, Interpreter

Jim Swaney
San Joaquin Valley Air Pollution Control District

Harlan Casida, Mayor
Melissa Whitten, City Manager
Sid Craighead, City Councilperson
City of Avenal

Dagoberto Ovalle, Councilperson
City of Avenal

Shelley Buranek (via teleconference)
United States Fish and Wildlife Service

ALSO PRESENT

Jay Salyer
Kings County Economic Development Corporation

Tom Frantz
Association of Irrigated Residents

Shawn Smith
Carpenters Local 1109

Miguel Rodriguez

Ken Lavinder

Carolyn Shaffer

Santano Rios

John Moreno

Charles Adams

Tony Castillo

Gloria Preciado

Gilbert Garza

Donna Curty

Ismael Vitela

Jeannie Tillotson

Miguel Aluniz

Maria Elena Aluniz

Pedro Mora

Manuel Villa

Ray Leon
Latino Policy Project

I N D E X

	Page
Proceedings	1
Opening Remarks	1
Introductions	1,3
Presentations	13
Public Adviser Miller	13
Hearing Officer Fay	15
Project Description	23
Applicant witness J. Rexroad	23
Exhibits	23/29
Direct Testimony	24
Cross-Examination by Mr. Simpson	27
Exhibits	28/29
CEC Staff witness J. Douglas	29
Exhibits	30/63
Exhibit	63/63
Direct Examination by Ms. DeCarlo	30
Cross-Examination by Mr. Simpson	34
Cross-Examination by Ms. Brostrom	46
Cross-Examination by Mr. Ashley	50
Redirect Examination by Ms. DeCarlo	52
Recross-Examination by Mr. Simpson	62
Noticing/Outreach	
Witness Elena Miller, Public Adviser	53
Examination by Presiding Member Byron	54
Cross-Examination by Mr. Simpson	64
Cross-Examination by Ms. Brostrom	66
Environmental Assessment	67
Greenhouse Gases	67
Applicant Witnesses J. Rexroad,	
G. Rubenstein and R. Lauckhart	68
Direct Examination by Ms. Luckhardt	68
Exhibits	69/99

I N D E X

	Page
Afternoon Session	101
Environmental Assessment - continues	
Greenhouse Gases - continued	
Applicant witnesses J. Rexroad, G. Rubenstein and R. Lauckhart - cont'd.	
Cross-Examination by Mr. Simpson	102
Redirect Examination by Ms. Luckhardt	128
Recross-Examination by Mr. Simpson	131
CEC Staff witnesses B. Birdsall, D. Vidaver, S. McClary and M. Layton	134
Exhibits	135/155
Direct Examination by Ms. DeCarlo	135
Cross-Examination by Ms. Brostrom	156
Redirect Examination by Ms. DeCarlo	176
Examination by Associate Member Douglas	178
Cross-Examination by Mr. Simpson	190
Air Quality	203
Applicant witness G. Rubenstein	203
Direct Examination by Ms. Luckhardt	203
Exhibits	203/231
Cross-Examination by Ms. Brostrom	232
Cross-Examination by Mr. Simpson	243
Public Comment	247
Environmental Assessment - continued	
Air Quality - continued	
CEC Staff witness J. Swaney (SJVAPCD)	252
Direct Examination by Ms. DeCarlo	252
Exhibit - FDOC	253/266
CEC Staff witness B. Birdsall	254
Direct Examination by Ms. DeCarlo	254
Exhibits	254/266
Cross-Examination by Ms. Brostrom	268
Redirect by Ms. DeCarlo	280
Recross-Examination by Ms. Brostrom	281
Cross-Examination by Mr. Simpson	282

I N D E X

	Page
Environmental Assessment - continued	
Air Quality - continued	
Intervenor witness R. Simpson	289
Exhibit	289/291
Cross-Examination by Ms. Luckhardt	291
Cross-Examination by Ms. DeCarlo	292
Biological Resources	293
CEC Staff witness S.Buranek(USFWS)	293
Direct Examination by Ms. DeCarlo	293
CEC Staff witness R. Anderson	298
Direct Examination by Ms. DeCarlo	298
Exhibits	298/302
Public Comment	305
Environmental Assessment - continued	
Biological Resources - continued	
CEC Staff witness R. Anderson - continued	
Cross-Examination by Mr. Simpson	326
Redirect Examination by Ms. DeCarlo	331
Applicant witness J. Stenger	333
Direct Examination by Ms. Luckhardt	333
Exhibits	334/335
Exhibits - appendices	448/449
Evening Session	338
Public Comment	338
Environmental Assessment - continued	
Worker Safety and Fire Protection	348
Applicant witness J. Rexroad	348
Direct Examination by Ms. Luckhardt	348
Exhibits	348/353

I N D E X

	Page
Environmental Assessment - continued	
Worker Safety and Fire Protection and Hazardous Materials	349
Applicant Witness J. Stenger	349
Direct Examination by Ms. Luckhardt	350
Exhibits	350/353
Exhibits	353/354
Public Health	
Applicant Witness G. Rubenstein	351
Direct Examination by Ms. Luckhardt	351
Exhibits	351/353
Cross-Examination by Ms. Brostrom	354
Cross-Examination by Mr. Simpson	359
CEC Staff Witnesses O. Odoemelam and A. Greenberg	369
Direct Examination by Ms. DeCarlo	370
Exhibits	370/381
Exhibits	380/381
Cross-Examination by Ms. Brostrom	381
Cross-Examination by Mr. Simpson	396
Redirect Examination by Ms. DeCarlo	409
Recross-Examination by Ms. Brostrom	409
Further Redirect Examination by Ms. DeCarlo	410
Alternatives	412
CEC Staff Witness C. Meyer	412
Direct Examination by Ms. DeCarlo	413
Exhibit	413/418
Cross-Examination by Ms. Brostrom	420
Cross-Examination by Mr. Simpson	427
Redirect Examination by Ms. DeCarlo	432
Recross-Examination by Mr. Simpson	432
Further Redirect Examination by Ms. DeCarlo	434
Applicant Testimony by Declaration	436
Exhibits	436/437

I N D E X

	Page
environmental Analysis - continued	
Soil and Water Resources	437
CEC Staff Testimony of C. Weaver	
by Declaration	437
Exhibits	437/437
CEC Staff Witness J. Douglas	438
Cross-Examination by Ms. Brostrom	439
Redirect Examination by Ms. DeCarlo	440
Recross-Examination by Ms. Brostrom	444
Applicant Testimony by Declaration	446
Exhibits	446/446
CEC Staff Testimony, Declarations and	
Exhibits	447
General Conditions	447/448
Compliance Monitoring	447/448
Facility Design	447/448
Applicant and CEC Staff Testimony,	
Declarations and Exhibits	447
Cultural Resources	447/448
Land Use	447/448
Noise and Vibration	447/448
Socioeconomic Resources	447/448
Traffic and Transportation	447/448
Transmission Line Safety and Nuisance	447/448
Visual Resources	447/448
Waste Management	447/448
Facility Design	447/448
Geology and Paleontology	447/448
Power Plant Efficiency	447/448
Power Plant Reliability	447/448
Transmission System Engineering	447/448
Briefing Schedule	449
Adjournment	455
Reporter/Transcriber Certificates	456

1 P R O C E E D I N G S

2 10:00 a.m.

3 HEARING OFFICER FAY: Good morning and
4 welcome to the evidentiary hearing on the proposed
5 Avenal Energy project. This is the Committee of
6 the California Energy Commission that is reviewing
7 this project.

8 To my immediate left is Commissioner and
9 Presiding Committee Member Jeffrey Byron. And to
10 his left is the Associate Commissioner, our
11 Chairman, Karen Douglas.

12 We also have the Adviser to Commissioner
13 Byron, Kristy Chew in the front row. And also
14 Chairman Douglas' Adviser, Diana Schwyzer Manetta,
15 in the front row. And I am Gary Fay; I'm the
16 Hearing Officer for this proceeding.

17 A few preliminary matters. The
18 restrooms are out in the lobby. Fair warning, you
19 may have to go through metal detectors, so you'll
20 want to make some reasonable accommodation with
21 the security people to make life as convenient as
22 possible.

23 I understand there will be some
24 refreshments available, is that correct?

25 MR. REXROAD: There's water out there

1 now, and that can be allowed in the courtroom.

2 And then at the lunch hour there will be lunch
3 provided.

4 HEARING OFFICER FAY: Okay. Water in
5 the lobby now that they'll allow to be brought in
6 here. And there will be some light lunch at the
7 lunch break so that people won't have to spend
8 time leaving and waiting to be served; and then
9 coming back. It makes it more efficient for us.
10 And the applicant was good enough to help us with
11 that.

12 I have given the Public Adviser some
13 handouts. Ms. Miller. There she is in back, in
14 the white blouse with the purple scarf. And she
15 has handouts, one of which is a topic and witness
16 list, which is sort of the order of the day we'll
17 be going through.

18 She has tentative exhibit lists that
19 would help you follow along. And she also has a
20 copy of the notice of this proceeding. The notice
21 was sent out on June 15th of 2009 that gave notice
22 of the prehearing conference that we held on June
23 30th, and today's evidentiary hearing.

24 We will be conducting a special comment
25 period beginning at 5:30, so if there's anybody

1 that was not able to come to the evidentiary
2 hearing but wants to schedule their time to make a
3 comment, that would be a good target opportunity.

4 I'd like, at this point, to take
5 introductions from the parties. Can we hear first
6 from the applicant?

7 MS. LUCKHARDT: Good morning. My name
8 is Jane Luckhardt and I'm project counsel.

9 MR. REXROAD: I'm Jim Rexroad; I'm the
10 project developer for project applicant.

11 MR. STENGER: I'm Joe Stenger with TRC.
12 We assisted Avenal Energy in putting together the
13 AFC.

14 MR. RUBENSTEIN: Gary Rubenstein with
15 Sierra Research. We're air quality consultants
16 for the project.

17 HEARING OFFICER FAY: Thank you. And
18 Commission Staff.

19 MS. DeCARLO: I'm Lisa DeCarlo, Energy
20 Commission Staff counsel. To my right is Joseph
21 Douglas, the project manager for the Energy
22 Commission Staff on this case.

23 And also in the audience we have various
24 staff members who will be coming up to give
25 testimony.

1 HEARING OFFICER FAY: Good. Is the
2 Intervenor Center on Race, Poverty and the
3 Environment, CRPE, here represented?

4 MS. BROSTROM: Yes. My name is Ingrid
5 Brostrom representing CRPE.

6 HEARING OFFICER FAY: Sorry, your name
7 is?

8 MS. BROSTROM: Ingrid Brostrom.

9 HEARING OFFICER FAY: Okay. And the
10 Tehipite Chapter of the Sierra Club.

11 MR. ASHLEY: My name is Chip Ashley and
12 I represent the Tehipite Chapter.

13 HEARING OFFICER FAY: Thank you. And
14 Rob Simpson.

15 MR. SIMPSON: Good morning; I'm Rob
16 Simpson, intervenor.

17 HEARING OFFICER FAY: I'll just say for
18 all the parties, the space, as you can see, is
19 quite limited. And if you can work with each
20 other, for instance if one of the intervenors
21 doesn't have any cross-examination and the other
22 needs a little extra space to spread out, perhaps
23 help them out with that. That would be
24 appreciated.

25 We are fortunate to have the Superior

1 Court of Kings County, but it is a small facility.

2 Do we have any elected officials here
3 today? Yes, sir. At this time would you like to
4 make any remarks?

5 MAYOR CASIDA: I'm Harlan Casida, Mayor
6 of the City of Avenal. And I'd like to take this
7 time to welcome each and every one of you to our
8 small city. Again, the facility is not that big,
9 but it goes with our community.

10 Should I make a statement of support for
11 the project at this time, or wait until the
12 public's time?

13 HEARING OFFICER FAY: Well, this is
14 fine, if you'd like to.

15 MAYOR CASIDA: Okay, well, I --

16 HEARING OFFICER FAY: We often do
17 this -- and we have another official who has some
18 time constraints -- just as a courtesy.

19 MAYOR CASIDA: Okay, well, I'll do it.

20 I stand before you in support of the
21 Avenal Energy project. For us, as a city, it's
22 been an eight-year project. Started eight years
23 ago with Duke Energy and Avenal got together. And
24 particularly their project, which we thought was a
25 very good project at that time for the technology

1 that was available.

2 Since that time the project has been
3 sold two times. And we are now under McQuery
4 (phonetic) and Avenal Energy. And, again, we are
5 in full support of this project.

6 With the advent of energy and technology
7 connected to the energy production, it's a better
8 project now than it was eight years ago.

9 We are in favor of it for many reasons.
10 It's going to be good for the city employmentwise.
11 It's going to bring employment to the City of
12 Avenal and the region in its construction and then
13 in its production of electricity.

14 It's also going to bring tax money to
15 Avenal, which we desperately need, like everybody
16 else in the state and the nation is in desperate
17 need of revenues.

18 Along with the employment of people it's
19 going to help our community because right now
20 we're at 25-plus unemployment in the City of
21 Avenal. A lot of that is due to things that have
22 happened in Sacramento that was out of our
23 control. People telling us what was best for us,
24 but it affects us and they don't realize it.

25 It's going to bring an industry to the

1 City of Avenal, which we do not currently have any
2 industry, unless you consider a state prison an
3 industry. We do currently have a California state
4 prison in our city limits.

5 The silence of opposition, I think, has
6 been in support of the project. You always have
7 the silent majority that say it's a good project,
8 but they don't come vocally and say much about
9 what they're in favor of.

10 And like I said, eight years ago very
11 little opposition, and we haven't seen a lot of it
12 until just recently.

13 So I stand before you in total support
14 of the Avenal Energy project. Thank you for your
15 time.

16 HEARING OFFICER FAY: Thank you.

17 PRESIDING MEMBER BYRON: Mr. Mayor,
18 thank you for being here this morning. We really
19 appreciate your taking the time to do so. And no
20 disparaging comments with regard to the
21 accommodations. We're glad to have an air
22 conditioned facility.

23 MAYOR CASIDA: None taken.

24 (Laughter.)

25 HEARING OFFICER FAY: Any roof over the

1 head is appreciated. We've had some rustic
2 settings over the years, and this is one of the
3 nicer ones, actually.

4 I would like to call Melissa Whitten,
5 City Manager of Avenal.

6 MS. WHITTEN: Good morning. I also
7 welcome everybody to our great city. We
8 appreciate you traveling all the way down here. I
9 know it's quite a ways, but this is our home, this
10 is our reality.

11 And as part of that I have been directly
12 involved with this project since its inception in
13 2001. The city has stayed and remained supportive
14 of this project. We felt it was a good project.

15 It is and has been, probably for the
16 last ten years, a key piece. We knew that we
17 needed an anchor tenant out at our industrial park
18 to get it going. Eight years ago it seemed as
19 though we were well on our way to making that come
20 true.

21 Because of the interest of a power plant
22 it became part of a larger plan when we submitted
23 an application to the EDA for a grant to help us
24 with infrastructure which will support our
25 industrial park.

1 As part of that grant plan application
2 it noted the power plant as our anchor tenant.
3 So, it does play a key piece in our economic
4 development plan.

5 But more than that, the city, just
6 piggybacking on what the Mayor said, it is a key
7 piece for us. And we have been supportive. We
8 know that it will provide good-paying jobs.

9 We know that there will be spinoff
10 industries for something, as such. And we also
11 know that there is a need for additional power for
12 California.

13 I don't want to take up a lot of time.
14 I'm just here to state that city staff is in
15 support. We have been since the beginning. And
16 we appreciate your consideration of our comments.

17 And, again, welcome to Avenal and thank
18 you very much.

19 HEARING OFFICER FAY: Thank you. And
20 Jay Salyer from the Economic Development Group.

21 MR. SALYER: Thank you. Thanks for
22 giving us this time this early in the hearing. My
23 name is Jay Salyer; I'm the economic development
24 manager for Kings County Economic Development
25 Corporation. And I'm speaking for the corporation

1 and for economic development within Kings County.

2 Harlan and Melissa said it very
3 eloquently, and they addressed pretty much all of
4 the points that I was hoping to address today.

5 This is, we feel, a very critical
6 project for the City of Avenal. Industrial
7 development will be critical to Avenal's future,
8 as we see agriculture starting to wane out here on
9 the west side.

10 They have their industrial park. This
11 will be a project that will be the first
12 industrial project within their industrial park.
13 It will basically put it on the map.

14 We feel very strongly that the
15 industrial park will be great for warehouse and
16 distribution, and hopefully some manufacturing
17 because of its location midway between the Bay
18 Area and southern California.

19 Avenal with its 25 percent unemployment
20 rate, it's a very difficult time for them.
21 Anything that we can do to advance job development
22 within the county, within this region, is going to
23 help out the City of Avenal and its citizens. The
24 addition to the tax base is going to be critical,
25 as well.

1 So, we are very much in favor of this
2 project. We've been working long and hard with
3 the City of Avenal on their industrial park, on
4 their applications to the Economic Development
5 Administration, the federal Economic Development
6 Administration, in their grant requests. And look
7 forward to the completion of this project and
8 getting some very critical power onto the grid.

9 Thank you very much.

10 HEARING OFFICER FAY: Thank you. Are
11 there any other officials here? Okay.

12 Right now I'd like the Commission's
13 Public Adviser, Elena Miller, --

14 ASSOCIATE MEMBER DOUGLAS: There was --
15 Gary.

16 HEARING OFFICER FAY: Oh, yes. Yes,
17 sir.

18 COUNCILPERSON CRAIGHEAD: My name's Sid
19 Craighead. I'm a councilman for the City of
20 Avenal and a citizen here.

21 I feel that being here for 20-plus years
22 teaching school and seeing how the town is, this
23 power plant will be an advantage for people that
24 need jobs starting out. It will give them
25 benefits.

1 It will give some of our younger people
2 incentives to go on and get an education and do
3 something down the road in industry or business;
4 instead of just working, out in the fields I mean.

5 But it's an important thing, I think,
6 for the city. It will bring funds to the city.
7 It's the things that we need in the city, and I
8 think it's an advantage that we have.

9 I know people have talked about it. And
10 I feel that this is something that's important to
11 Avenal if we want to continue to grow or to grow
12 and survive here in the valley, this is one thing
13 that would help.

14 And also it will not help just us, but
15 all the surrounding areas, with power. This is
16 something that's an important thing. I know we
17 talk about other types of power, but right now
18 this is one of the powers that is important that
19 we need. And I feel it's important for us, as a
20 city, as a county and as a state.

21 And that's all I have. Thank you.

22 HEARING OFFICER FAY: Great, thank you.

23 And now I'd like to ask the Public
24 Adviser to explain the outreach that their office
25 has done over the years that this case has been

1 under review. And also the process they have.

2 Elena can explain it better than I, but
3 she has blue cards. And if people fill these out,
4 it helps us be sure to call on you and get your
5 name right, and that sort of thing.

6 Elena.

7 PUBLIC ADVISER MILLER: Good morning. I
8 think everybody in this direction knows who I am,
9 so I'm going to try and tilt this around. For
10 anybody who doesn't know who I am, I am indeed
11 Elena Miller. I'm the Public Adviser for the
12 California Energy Commission. I am an attorney
13 for the state of California and my role and the
14 role of my office is to assure the public that
15 they have the information that they need about our
16 proceedings.

17 In this case it's a power plant
18 proceeding, as we all know. But these are
19 complicated proceedings and it's essential that
20 the public understand how they can participate,
21 both informally and formally.

22 This case is one that predates my term
23 as Public Adviser. And so there was a gentleman
24 in my office who has since retired, Nick Bartsch.
25 He handled the outreach for this case, at the very

1 beginning of the case, the site visit and the
2 informational hearing.

3 The Public Adviser's role is to do a
4 significant amount of outreach. We do not
5 outreach to property owners. We are separate and
6 distinct from that type of outreach. We outreach
7 to the community, to local elected officials, to
8 local nonprofit organizations, to environmental
9 organizations. And also to individuals that
10 contact our office.

11 And there have been a number of
12 individuals and organizations that have contacted
13 my office in the course of this case. We have
14 worked with them to get them to understand and
15 comprehend what this case is.

16 The challenges are always that I cannot
17 represent people. And there have been times where
18 people have had legal questions. I can simply
19 guide them by providing them with the statutory
20 guidance that's available, and allow them to ask
21 me questions. And I do my best to help them. And
22 I have done so in this case.

23 Recently -- this is my second time in
24 Avenal. And I'm thankful for having this place.
25 I want to let everybody know that there is an

1 interpreter here today. That's an important
2 point. If anybody needs an interpreter, today we
3 will have one for the duration. I'm not aware of
4 anybody needing one at this time.

5 I will be here for this evening. If
6 anybody is in need of assistance please find me.
7 I can help explain the day, how the evidentiary
8 hearing is going to proceed; who the individuals
9 are that are speaking.

10 I know that there's often confusion
11 about who the people are that are up here. And so
12 if anybody has those types of questions, please
13 seek me out. I am available.

14 And I think that that's all that I need
15 to speak to right now. Thank you.

16 HEARING OFFICER FAY: Okay, thank you.
17 Elena raised the concept of an interpreter. I'd
18 just like to introduce Gabriela Torres, if she
19 would stand. I think she's in the back. There's
20 Gabriela. And she's going to be with us all day
21 today, so if you are aware of anybody that needs
22 help with interpretation, she's the one to talk
23 to. Thank you, Gabriela, and thank you for being
24 here.

25 I'd also like to ask people at this time

1 to be sure that your cellphones are silenced. If
2 you need to be in contact with the outer world,
3 put them on vibrate. And that way it won't
4 disturb our proceeding. Thank you.

5 One of the most important things we need
6 to emphasize in our process is something that we
7 call the ex parte rule. And what that means is
8 that neither the parties or elected officials or
9 members of the public are permitted to privately
10 contact the Committee, the people up here, or
11 their advisers, regarding the evidentiary record
12 in this case.

13 Rather, any written or oral contact must
14 occur in the official public forum with all
15 parties present, or it must be submitted in
16 writing to the Commission's docket. And then it
17 would be served on all other parties. This avoids
18 any closed-door communication and makes sure that
19 the process is fair to everybody.

20 So, if you choose to make a comment
21 today, that's great. Just make it on the record.
22 Don't wait for the break to talk to a
23 Commissioner. Speak right out on the record. And
24 if you think of something later, submit a comment
25 in writing to the Commission's dockets and it will

1 be filed in the case.

2 Now, for just a moment I'd like to go
3 over the format today. This evidentiary hearing
4 is a formal adjudicatory process to receive
5 evidence from the parties.

6 The technical rules of evidence are
7 generally followed. However, any relevant,
8 noncumulative evidence may be admitted if it is
9 the sort of evidence on which responsible persons
10 are accustomed to rely in the conduct of serious
11 affairs.

12 Testimony offered by the parties shall
13 be under oath administered by the court reporter
14 to my right.

15 Each party has the right to present and
16 cross-examine witnesses, introduce exhibits and to
17 rebut evidence of another party. Questions of
18 relevance and admissibility will be decided by the
19 Committee.

20 Hearsay evidence may be used to
21 supplement or explain other evidence, but shall
22 not, alone, be sufficient in itself to support a
23 finding.

24 The Committee will rule on motions and
25 objections. After a ruling is made no more time

1 is allowed for further argument. Parties may
2 assert a continuing objection that will be
3 addressed in the Committee's written decision.

4 Today the Committee will take
5 administrative notice of some matters. And, in
6 particular, I'll call your attention to the fact
7 that on June 15th the Committee took
8 administrative notice of the Energy Commission's
9 Siting Committee's greenhouse gas guidance report.
10 And that can be found online at the Commission's
11 website at [www.energy.ca.gov/publications/](http://www.energy.ca.gov/publications/searchreports.php)
12 [searchreports.php](http://www.energy.ca.gov/publications/searchreports.php). There's an entire website on
13 climate change.

14 In addition, we'd like to inform the
15 parties today of our intent to take official
16 notice of the report prepared for the Commission
17 Staff by MRW and Associates entitled, "Framework
18 for Evaluating Greenhouse Gas Implication of
19 Natural Gas-Fired Power Plants in California."
20 That's dated May 2009, and it has been docketed in
21 this case on June 4th of this year.

22 That can be found at [www.energy.ca.gov/](http://www.energy.ca.gov/2009publications)
23 [2009publications](http://www.energy.ca.gov/2009publications), no space, [/cec-700-2009-009/](http://www.energy.ca.gov/2009publications)
24 [cec-700-2009-009.pdf](http://www.energy.ca.gov/2009publications).

25 If you didn't catch all that --

1 (Laughter.)

2 HEARING OFFICER FAY: -- I'm sure Ms.
3 Miller can help you find the url for that.

4 The official record in this case
5 includes sworn testimony of the parties' witnesses
6 and the court reporter's transcript of the
7 evidentiary hearing, the exhibits formally
8 received into evidence, the briefs that will be
9 filed later, and various pleadings, orders,
10 notices, and oral and written comments submitted
11 by members of the public.

12 The Committee's decision will be based
13 solely on the record of competent evidence in
14 order to determine whether the project complies
15 with applicable law.

16 Members of the public who wish to speak
17 should write their comments on blue cards, as I
18 mentioned. And we will have a designated time for
19 public comment at least at the 5:30 period. If we
20 are taking evidence at that time, we will break
21 for public comment since that's when we told
22 people to come down. And then resume taking
23 evidence after the public comment.

24 There is an exhibit list in the lobby.
25 Yes, Ms. Miller said exhibit list in the lobby, as

1 well as a topic and witness list. The exhibit
2 list would allow you to follow along and check
3 things that the parties have introduced, or will
4 be introducing today.

5 And in the interest of time we will
6 allow and encourage the applicant and staff to
7 offer into evidence their respective filings
8 related to uncontroverted topics. These will be
9 offered by means of declaration. Since there's no
10 dispute on many of these areas, especially the
11 ones we'll hear later in the day, it will merely
12 be noted. And the declarations and the testimony
13 will be received into evidence.

14 However, we do have topics that are more
15 controversial. And so if there's no other
16 preliminary matters, I'd like to begin with one.

17 Would like to make a comment,
18 Commissioner?

19 PRESIDING MEMBER BYRON: One remark, if
20 I may. Hi, everyone. I'm Jeff Byron. I'm the
21 Presiding Member on this Committee, and I'm joined
22 by the Chairman of our Commission, who is my
23 Associate Member on this particular Committee.

24 As you know, we'll be listening to the
25 evidence today and all the public comment. And

1 we'll be making a recommendation to our fellow
2 Commissioners with regard to this application.

3 Our hope is that we will hear everything
4 we need to hear today prior to the public comment.
5 If not, time allowing, we'll continue into the
6 evening taking evidentiary information today.

7 I'm hopeful that we will finish our work
8 today, but if not, I will certainly be back here
9 tomorrow so that we can complete it in a timely
10 manner.

11 I thank you all for being here today.
12 You won't hear much from us except for, perhaps,
13 some questions.

14 Madam Chairman, did you want to say
15 anything?

16 ASSOCIATE MEMBER DOUGLAS: Just that I'm
17 pleased to be here, as well, in Avenal. And
18 looking forward to hearing from all the parties.

19 PRESIDING MEMBER BYRON: Mr. Fay.

20 HEARING OFFICER FAY: Thank you.

21 The Committee will be perhaps silent but
22 very attentive. They are the decisionmakers and
23 that's whose attention you want to get.

24 Our first real substantive topic will be
25 regarding greenhouse gases and how the project may

1 affect that. But before we do that, I'd like both
2 the applicant and staff to give a brief
3 introduction to the project the way it's conceived
4 and designed. And I know the staff has a slight
5 modification to their FSA. So we'll start with
6 the applicant, Ms. Luckhardt.

7 MS. LUCKHARDT: Mr. Fay, then are you
8 asking for us to go through the formal process of
9 introducing the executive summary testimony at
10 this time? Or would you just like Mr. Rexroad to
11 give you a general short project description?

12 HEARING OFFICER FAY: As I understand
13 there's no controversy on this. So, you can
14 introduce it by declaration now or after he does
15 the summary. But we'd like to be as brief as
16 possible and the main purpose is to get the
17 summary, just so the audience is oriented.

18 MS. LUCKHARDT: Okay. And then would
19 you like the summary to be sworn testimony, in
20 which case would you like to --

21 HEARING OFFICER FAY: Yes, yes.

22 MS. LUCKHARDT: Okay. Mr. Rexroad needs
23 to be sworn.

24 HEARING OFFICER FAY: Okay. Mr.
25 Rexroad, please stand.

1 Whereupon,

2 JIM REXROAD

3 was called as a witness herein, and after first
4 having been duly sworn, was examined and testified
5 as follows:

6 THE REPORTER: Would you please state
7 and spell your name for the record?

8 THE WITNESS: Jim Rexroad,R-e-x-r-o-a-d.

9 MS. LUCKHARDT: And the applicant has
10 previously filed both the prefiled testimony as
11 well as the declarations of both Joseph Stenger
12 and Jimmy Rexroad to sponsor the executive
13 summary. And so we ask that those be admitted
14 into the record at this time, or after following
15 Mr. Rexroad's short summary of the project
16 description, or the executive summary.

17 HEARING OFFICER FAY: Any objection?
18 Hearing none, so moved. And you will be
19 referencing relevant exhibits --

20 MS. LUCKHARDT: The relevant exhibits
21 that come in with the executive summary are the
22 following sections of exhibit 1. That would be
23 section 1, section 6.1 and appendix 1-1, and
24 exhibit 25(a).

25 HEARING OFFICER FAY: Okay, thank you.

1 Go ahead.

2 MR. REXROAD: So that the Commissioners
3 don't have to stand, I'll stand.

4 PRESIDING MEMBER BYRON: We enjoy
5 standing every once in awhile. That's fine.

6 (Laughter.)

7 MR. REXROAD: All right. I suspect I'll
8 be sitting a lot, so I'll stand anyway.

9 DIRECT TESTIMONY

10 THE WITNESS: This is a 600 megawatt
11 natural gas-fueled power plant that is proposed to
12 be constructed on a 148-acre parcel east of
13 interstate 5 along Avenal Cutoff Road, on the
14 easternmost end of the Avenal city limits.

15 It's approximately 6.5 miles from city
16 hall. So to give you a nice reference from --
17 which is about a half a mile that way, or to the
18 east of here.

19 It's proposed to be a GE Frame 7, two on
20 one, combined cycle plant with approximately 100
21 megawatts of supplemental firing. It will be
22 constructed with environmental controls to include
23 selective catalytic reduction, SCR; dry lowNox
24 burners for combustion firing control; and an
25 oxidation catalyst for VOCs and carbon monoxide

1 control.

2 The limits that we are proposing, the
3 emissions for this project are as demonstrated by
4 the FDOC that's been issued by the San Joaquin Air
5 District, are demonstrated to be well below the
6 standards set by the state of California.

7 The project does own all of the emission
8 reduction credits required for mitigation of the
9 existing emissions for this power plant for
10 criteria pollutants.

11 The plant is designed for a hot start of
12 two hours or less, so the plant can meet rapid
13 reliability requirements. It's an air-cooled
14 plant, so water consumption from this plant is
15 approximately 20 acrefeet per year in total, with
16 a worst case consumption of approximately 100
17 acrefeet per year.

18 The project is proposed to interconnect
19 at the Gates 230 kilovolt substation,
20 approximately six miles north of the plant site.
21 It will also interconnect to the PG&E backbone
22 natural gas pipeline near the intersection of
23 Avenal Cutoff Road and Plymouth Avenue, near the
24 Kettleman compressor station.

25 The plant is proposed, during the

1 construction phase, to have on average around 300
2 construction workers on the site. It's
3 approximately 325 on average. And up to 25
4 permanent employees onsite.

5 We expect the project to cost at least
6 \$530 million to construct, which will translate to
7 approximately \$5 million in property taxes to the
8 county, of which \$1 million of that at least will
9 flow to the city of Avenal.

10 We also believe, based on franchise
11 taxes for the natural gas purchased, that it will
12 be providing another at least \$2.5 million of
13 franchise taxes to the city of Avenal due to our
14 natural gas purchases. So a fairly substantial
15 income to the city of Avenal.

16 And I think with that I'll conclude my
17 comments of the description of the project and
18 answer any questions.

19 HEARING OFFICER FAY: Thank you. Does
20 staff have any questions of the applicant?

21 MS. DeCARLO: No questions.

22 HEARING OFFICER FAY: Do any of the
23 parties wish to question the applicant on the
24 general description?

25 MR. SIMPSON: I have a question.

1 CROSS-EXAMINATION

2 BY MR. SIMPSON:

3 Q You mention 100 acrefeet. I thought
4 there was a permitting opportunity for 200
5 acrefeet of water in here.

6 A No. The plant has a letter from the
7 city of Avenal to provide up to 200 acrefeet of
8 water per year. The plant licensing criteria is
9 for only 100 acrefeet.

10 So the 100-acrefeet limit will be the
11 controlling water consumption limit for the plant.

12 Q So what's the basis for the difference
13 between 100 and 200?

14 A Nice round number to ask the city for.
15 It's pretty much that simple. We were including
16 potable water consumption in that allowance. And
17 at the time the city had sufficient allocation for
18 that, so we provided for that much water to be
19 asked for from the city.

20 HEARING OFFICER FAY: And we will be
21 addressing water specifically at a later time.

22 MR. SIMPSON: I was just -- thank you.

23 HEARING OFFICER FAY: Anything further,
24 then? Okay. Thank you. Ms. Luckhardt, anything
25 further?

1 MS. LUCKHARDT: Nothing further --

2 HEARING OFFICER FAY: Redirect?

3 MS. LUCKHARDT: -- unless you would like
4 us to also enter the project description exhibits
5 in now, or would you prefer to do that later?

6 HEARING OFFICER FAY: I'd like you to
7 move that now, if you would, please.

8 MS. LUCKHARDT: And we will also move
9 the following exhibits in, starting with exhibit
10 1, sections 2.0, 2.1, 2.2; section 3 and section
11 4. Those are all of exhibit 1. Exhibit 25(b),
12 exhibit 21(n) and exhibit 21(o).

13 So applicant moves those exhibits for
14 the project description at this time, as well.

15 HEARING OFFICER FAY: As well as the
16 previously identified?

17 MS. LUCKHARDT: The previous identified
18 exhibits were identified in the area of executive
19 summary. These are identified separately as
20 project description. That's just the difficulty
21 between the AFC format and the FSA format, in some
22 instances. And so we tend to split them out.
23 Those are the two subject areas. Both of these
24 subject areas have prefiled all of the testimony,
25 have prefiled the declarations of the sponsoring

1 individuals, as well as their r, sum, s.

2 HEARING OFFICER FAY: Okay. Any
3 objection to receiving those at this time? I hear
4 none. So moved. Those are entered into the
5 record at this point.

6 Now we'll move to the staff and ask them
7 to forego any repetition of what we've heard, but
8 just detail the revisions to your FSA.

9 MS. DeCARLO: Yes, we have Mr. Joseph
10 Douglas needs to be sworn in.

11 HEARING OFFICER FAY: Please swear the
12 witness.

13 Whereupon,

14 JOSEPH DOUGLAS
15 was called as a witness herein, and after first
16 having been duly sworn, was examined and testified
17 as follows:

18 THE REPORTER: Please state and spell
19 your name for the record.

20 THE WITNESS: Joseph Douglas,
21 J-o-s-e-p-h D-o-u-g-l-a-s.

22 MS. DeCARLO: And we have two additional
23 exhibits we would like marked. Should we do that
24 at this time so we can reference --

25 HEARING OFFICER FAY: Yes, identify

1 them, please.

2 MS. DeCARLO: Okay, we have Energy
3 Commission Staff's prehearing conference
4 statement, which can be marked exhibit number 201.

5 HEARING OFFICER FAY: Okay.

6 MS. DeCARLO: I think that's the next on
7 our list. And then Energy Commission Staff's
8 update to prehearing conference statement and
9 minor errata to final staff assessment. And
10 that's --

11 HEARING OFFICER FAY: And that will be?

12 MS. DeCARLO: -- exhibit 202.

13 HEARING OFFICER FAY: 202.

14 MS. DeCARLO: And both of those were
15 previously served and filed on all the parties and
16 made publicly available.

17 HEARING OFFICER FAY: Okay. Go ahead.

18 DIRECT EXAMINATION

19 BY MS. DeCARLO:

20 Q Mr. Douglas, did you prepare the
21 testimony titled Executive Summary in the final
22 staff assessment, exhibit 200?

23 A Yes.

24 Q Did you oversee the preparation of the
25 declarations and r,sum,s contained in Energy

1 Commission Staff's prehearing conference
2 statement, exhibit 201?

3 A I did.

4 Q Did you oversee the preparation of the
5 errata contained in Energy Commission Staff's
6 update to prehearing conference statement and
7 minor errata to final staff assessment, exhibit
8 202?

9 A Yes.

10 Q Was a statement of your qualifications
11 attached to the final staff assessment?

12 A Yes, it was.

13 Q Do the opinions contained in the
14 testimony you are sponsoring represent your best
15 professional judgment?

16 A Yes.

17 Q Do you have any additional errata to the
18 executive summary section you would like to offer?

19 A Yes. On page 1-4, second paragraph, the
20 last sentence, PSA should be changed to FSA. The
21 sentence should read: Staff has followed each of
22 the above steps for the following 11 sections to
23 the FSA, air quality, hazardous material
24 management, land use, noise, public health,
25 socioeconomics, soil and water resources, traffic

1 and transportation, transmission line safety and
2 nuisance, visual resources and waste management."

3 In addition, the last paragraph on that
4 same page, the word socioeconomics should be
5 removed. The sentence should read: Staff has
6 determined that the project would not cause
7 significant adverse effect, indirect or cumulative
8 impacts in the areas noted above, and therefore
9 staff concludes that there are no environmental
10 justice impacts for this project."

11 Q And questions have been raised
12 concerning the sufficiency of our noticing of the
13 final staff assessment and the final staff
14 assessment workshop. Can you briefly describe how
15 notice was provided for these two items?

16 A Well, the notice for the availability
17 for the FSA, as well as the notice for the public
18 workshop concerning the FSA, was contained in a
19 single notice that was noticed on June 10th to all
20 the parties in the area, public in the area, as
21 well as the agencies and the libraries.

22 And it was held at Sunset Unified School
23 District here in Avenal. There's a -- it started
24 at 2:00. We had a day session as well as an
25 evening session to provide comments from the

1 public.

2 And during that workshop, just briefly,
3 there was questions, and very good questions, all
4 day as well in the evening, as well. So the
5 public was there for both sessions.

6 Q And was that notice provided within the
7 timeframe required by the Energy Commission's
8 regulations?

9 A Yes, it was.

10 Q And are you aware of any noticing that
11 the Public Adviser's Office did for the FSA
12 workshop?

13 A Yes, I believe they noticed it in the
14 papers, as well as our notice.

15 Q And was that notice also conducted in
16 Spanish?

17 A Yes, it was.

18 Q And does that conclude your testimony?

19 A Yes, it does.

20 MS. DeCARLO: The witness is available
21 for questions.

22 HEARING OFFICER FAY: Any questions by
23 the applicant?

24 MS. LUCKHARDT: No questions.

25 HEARING OFFICER FAY: Any questions by

1 any of the intervenors?

2 MR. SIMPSON: I think so. So this is
3 the appropriate witness to ask about noticing
4 issues?

5 MS. DeCARLO: Yes.

6 HEARING OFFICER FAY: You can certainly
7 ask.

8 MR. SIMPSON: Okay.

9 CROSS-EXAMINATION

10 BY MR. SIMPSON:

11 Q The CEC's noticing process, what's your
12 goal when you provide a public notice?

13 A The goal of the Energy Commission is to
14 provide notice to the public so they can come out
15 and provide the comments. They can get a fair and
16 adequate idea of what's going to happen in their
17 area, in their community.

18 Q So would the location of the project be
19 an important thing to be in a notice?

20 A I believe the location of the project in
21 the notice is on the map, which is -- I have a
22 copy of the notice here. So, yeah, the location
23 of the project, I believe, is in the notice.

24 Q So an address or a map, is that what
25 you're saying?

1 A Yeah. Not necessarily address only
2 because it may not be addressed as yet. But a
3 general area. I mean in the project description
4 it goes very detailed into the township and
5 location of the section.

6 But addresses may not be quite
7 available, so we do the best we can to try to tell
8 people where exactly the project's going to
9 happen.

10 Q So you included a map of where the
11 project will happen?

12 A I believe so. If I'm not mistaken.

13 Q Thank you. And these notices were
14 published in the newspaper in Spanish and English?

15 A Yes, to my recollection, yes.

16 Q Okay. I read the notices. One of them
17 mentioned that the project would use 97 percent
18 less water, I think it was, than the original
19 plan. Are you aware of a change in the plan that
20 uses less water?

21 A If you're referring to the original
22 proposal, that was before I worked at the Energy
23 Commission, but they've changed the design so that
24 may be indeed correct. But they're using dry
25 cooling now, whereas before I believe it might

1 have been proposed otherwise. But now they have
2 reduced their water significantly.

3 Q So, do you think 90 percent less gives
4 somebody an idea of how much water it uses? Or
5 would you need some basis like an original amount
6 of water, or final amount of water it uses?

7 A Not necessarily, because I believe that
8 statement indicates a good effort to reduce the
9 water. And it explained moreso in the FSA exactly
10 under the water, exactly how much and the
11 quantities. And if you look to, on the face of
12 it, 97 percent of what, if that's what you're
13 trying to get at --

14 Q Yes.

15 A But when you read the section in the FSA
16 it explains pretty clearly that staff concludes,
17 recommends that there's no significant impact on
18 water resources or groundwater because of the fact
19 of them using dry technologies.

20 And it goes in it, as applicant
21 indicated, exactly how much water they will be
22 using.

23 Q Do you think the notice would have been
24 more clear if it said how much water it actually
25 used in gallons or acrefeet or something someone

1 could have some basis?

2 A Well, I don't know if that exactly would
3 have been helpful. I guess you say, well, at what
4 point do you include everything you have, and not
5 to neglect any subject, for sure. But it is
6 available in other publications, as well as coming
7 out and asking the questions, that very same
8 question.

9 And during the FSA workshop there was a
10 question very similar to that. And that, as well
11 as other subjects were asked. And their answer,
12 we had a very lively discussion about those
13 things.

14 So I think having the workshop and
15 having the public come out is a good place to --

16 Q Sure. I'm just talking about the notice
17 right now, though. If your notice is meant to
18 provide information to the public so they know if
19 they want to participate, if you actually provide
20 information about how much water it uses, do you
21 think you would have a different effect?

22 MS. DeCARLO: Objection. I believe the
23 witness has already responded to that question.

24 HEARING OFFICER FAY: Yeah, I think
25 that's asked and answered.

1 MR. SIMPSON: Okay. Thank you.

2 BY MR. SIMPSON:

3 Q Was there anything in the notice about
4 the effects on air quality?

5 A This particular notice?

6 Q Any notice.

7 A Just generally what the project's about.

8 Yes. It did talk about summary of conclusions.

9 And did indicate the San Joaquin Valley Air
10 Pollution Control District determined that the
11 project complies with appropriate rules and
12 requirements of the district. And would not
13 contribute to the degradation of air quality.

14 So it had indication. And I think if
15 you're looking for a full-blown air quality
16 section, I think the notices aren't meant to do
17 that. I mean, just meant to tell you exactly
18 what's going on and to give you some information.

19 But I think to produce a notice, that
20 would be quite large; may actually distract and
21 make people not want to come out. I'm just
22 thinking that if you wanted to discourage people
23 by putting this huge notice in front of them.
24 They just really want to know where it is and
25 what's happening and what's their opportunity to

1 come and discuss things.

2 Q So, do you find that air quality's one
3 of the issues that people are interested in in
4 these proceedings?

5 A Of course they are. And that's why we
6 include it, I think, part of that, as well as
7 other things in the notice, just, you know. But
8 like I said before, where do you draw the line at
9 how much you want to put in a notice where it's
10 just so large, or it's that people may or may not
11 read all the things.

12 We want to make sure that we get in
13 poignant parts and the poignant points so that
14 they can get a fair understanding. And maybe
15 produce more interest so they'd want to go and
16 read the PSA or FSA or other documents.

17 Q There's a --

18 A I don't think the notice serves as the
19 document, itself. And I understand that you may
20 not think there's enough information, but I think
21 at some point I think there is enough information
22 to get people interested in coming out and asking
23 questions.

24 Q Do you think -- I'm looking at air
25 quality table 14 from the final staff assessment.

1 HEARING OFFICER FAY: Mr. Simpson, I
2 wonder if this question would be better addressed
3 when we take up air quality particularly. Then we
4 could all focus our attention on air quality, per
5 se. Would that help your presentation?

6 MR. SIMPSON: Some of my questions are
7 specific to the noticing of these proceedings, and
8 whether the public is accurately informed of
9 what's transpiring here. So I would like a couple
10 more questions here.

11 HEARING OFFICER FAY: All right.

12 BY MR. SIMPSON:

13 Q For instance, on this air quality table
14 14, which shows the limiting standard for
15 different pollutants and it shows a comparison of
16 that limiting standard with what it is and what it
17 will be with this facility.

18 For the particulate matter, which is
19 probably the worst thing for the immediate
20 community, it shows --

21 MS. LUCKHARDT: I'm sorry, Mr. Simpson,
22 I'm just trying to follow your question. And
23 you're saying air quality table 14. Do you know
24 which document that's from?

25 MR. SIMPSON: Yeah, that's the FSA, 4.1-

1 24.

2 MS. LUCKHARDT: Oh, the page number.

3 Sorry about that. Thank you.

4 BY MR. SIMPSON:

5 Q So the particulate matter, it shows that
6 with this facility it will be 708 percent of the
7 maximum of the limiting standard. Do you think if
8 people knew that this facility would bring the
9 area into 708 percent of the limiting standard
10 they would be more interested in this proceeding?

11 A Well, once again, the notice is to
12 provide opportunity for people to come out. And I
13 understand where you think we need to add more
14 possible potential hazards, but once again, the
15 conclusions drawn from the FSA indicate that
16 there's no adverse effect, impact.

17 So I think to put that in the notice,
18 while maybe information they may want to bring up,
19 but they can also go and see an FSA, come to the
20 workshop. We had people there that were informed,
21 based on our notice. So, I don't believe the
22 notice was not giving information, or not enough
23 information, because we had very well informed
24 people at that workshop.

25 As well as -- I wasn't a party to, but

1 the previous workshop, I understand, had plenty of
2 people that were well informed about the project
3 and asking these very same questions.

4 So I think the notice is adequate in
5 bringing people's attention to the project.

6 Q I understand that the notice was
7 adequate to bring the people that came. My
8 question is do you believe that if the rest of the
9 people knew that this was a 708 percent of the
10 limiting standard it would generate more public
11 interest.

12 MS. DeCARLO: Objection, I believe the
13 staff's witness has already testified to that.
14 And I will have to object to any further questions
15 along these lines. I don't think they're relevant
16 to the project before us.

17 Mr. Douglas has testified to what
18 noticing did take place for the final staff
19 assessment and the final staff assessment
20 workshop. He's already explained the reasoning
21 for the noticing and what staff tries to convey,
22 what information they try to convey in the
23 noticing.

24 I believe Mr. Simpson is trying to get
25 at a point that he tried to make at the prehearing

1 conference regarding noticing requirements that
2 ultimately are not applicable to the Energy
3 Commission.

4 HEARING OFFICER FAY: Mr. Simpson, would
5 you like to respond to the objection?

6 MR. SIMPSON: No.

7 HEARING OFFICER FAY: Okay. Then that
8 will be sustained. And you, of course, do have
9 the opportunity, to the extent this is a policy
10 question, to address the Commission in the briefs
11 you file in this case. Okay?

12 MR. SIMPSON: Thank you.

13 HEARING OFFICER FAY: Let's move on.
14 Anything further?

15 MR. SIMPSON: Yeah.

16 BY MR. SIMPSON:

17 Q You mentioned a change in the report,
18 the change from PSA to FSA. Was that also in the
19 notice? Where it says the PSA --

20 A No, it wasn't. It was --

21 Q -- will be available?

22 A No.

23 Q As opposed to the FSA --

24 A We were --

25 Q -- will be available?

1 A Upon more review we realized that was
2 the case. And then we made that small errata
3 change, which was entered into the record.

4 Q Do you know when the opportunity for
5 discovery ended?

6 A Well, actually I don't know exactly.

7 Q Thank you.

8 HEARING OFFICER FAY: That's a matter of
9 record. It's in Commission regulations. It's
10 normally 180 days after the Commission adopts the
11 application as adequate.

12 MR. SIMPSON: I see.

13 BY MR. SIMPSON:

14 Q So information that the applicant or
15 others submit after that 180 days, how do we
16 discover that? How do we get discovery for the
17 addendums, how do we get discover for the reports
18 that happened after that 180 days?

19 MS. LUCKHARDT: I guess I kind of feel
20 like I should object to this because I'm not
21 really sure that that's an appropriate question
22 for staff to be answering, which is just a general
23 question of how does an intervenor get specific
24 information. That seems like that's more
25 appropriate for the Public Adviser's Office.

1 HEARING OFFICER FAY: First of all, Mr.
2 Simpson, I would have to agree that this is not
3 the appropriate witness on that. And, again, I
4 think if it's something that you think
5 disadvantages you or any other party, --

6 MR. SIMPSON: Sure.

7 HEARING OFFICER FAY: -- you can argue
8 that. But in doing so you should be aware of the
9 Commission's regulations that do set time limits
10 for gathering information and for the role of an
11 intervenor once they intervene.

12 It's always advantageous for parties
13 that are interested in the case to intervene as
14 early as possible so that they do have full access
15 to the discovery process.

16 Do you have any other questions of this
17 witness?

18 MR. SIMPSON: Do I have an objection to
19 the last question, or can I be directed who the --

20 HEARING OFFICER FAY: Yes, and that's
21 been sustained.

22 MR. SIMPSON: -- right person to ask
23 that --

24 HEARING OFFICER FAY: You should stop
25 that line of inquiry to this witness.

1 MR. SIMPSON: Okay. No other questions,
2 thank you.

3 HEARING OFFICER FAY: Okay. And did any
4 of the other --

5 MS. BROSTROM: I just had a few.

6 HEARING OFFICER FAY: Yes.

7 CROSS-EXAMINATION

8 BY MS. BROSTROM:

9 Q First, I heard you say in response to
10 Mr. Simpson's first question, that the purpose of
11 public notice is to encourage people to attend and
12 publicly participate, is that correct?

13 A That was it.

14 Q Can you tell me what the distance is of
15 this project to Kettleman City?

16 A The exact distance I don't know.

17 Q Is it around the same distance as the
18 project is to Avenal?

19 A I'm not sure.

20 Q Do you know the percentage of Avenal and
21 Kettleman City residents that are Spanish-
22 speaking?

23 A I believe it's quite high; the exact
24 number escapes me.

25 PRESIDING MEMBER BYRON: A little

1 louder, please.

2 THE WITNESS: Oh, I believe it's quite
3 high.

4 BY MS. BROSTROM:

5 Q Can you tell me who made the
6 determination not to include Kettleman City in the
7 noticing send-outs?

8 MS. DeCARLO: Objection, assumes facts
9 not in evidence.

10 BY MS. BROSTROM:

11 Q Did the CEC --

12 MS. BROSTROM: I can change that.

13 HEARING OFFICER FAY: Well, yeah, do you
14 want to lay a foundation for that?

15 MS. BROSTROM: Yeah.

16 BY MS. BROSTROM:

17 Q Did the CEC include Kettleman City in
18 its noticing send-outs, mailings?

19 A I've looked at the list and there is
20 some Kettleman City addresses. It was noticed.

21 Q How did the CEC determine who to send
22 the notices to?

23 A I believe the policy is the specific
24 area around the project. And I believe this
25 project we went beyond that to include a broader

1 area.

2 Q If the distance to Kettleman City is the
3 same as Avenal, should Kettleman City residents
4 been included in that zone?

5 MS. LUCKHARDT: I object. I don't
6 believe that that's a correct assumption.

7 HEARING OFFICER FAY: The witness
8 testified that the noticing went beyond the
9 requirements. So now you're asking if they went
10 beyond in one direction they should have gone
11 beyond those requirements in other directions, is
12 that correct?

13 MS. BROSTROM: Exactly. Yeah, exactly,
14 that's the question.

15 HEARING OFFICER FAY: Okay. This was, I
16 understand, a policy decision on their part. Can
17 the witness answer why?

18 THE WITNESS: Well, I may attempt it.
19 My understanding it went beyond policy in response
20 to some public comments and public interest. And
21 that's my understanding.

22 BY MS. BROSTROM:

23 Q But you don't have any information as to
24 why Avenal was included, but Kettleman wasn't, in
25 that zone?

1 A No.

2 Q How long has this current process, in
3 terms of months, how long has it been going on?

4 A Sorry, repeat the question?

5 Q This current process, how long has this
6 permitting process been ongoing?

7 A For this project? I don't know the
8 exact day, I believe it's been a couple years.

9 Q When did --

10 A Less than that, actually.

11 Q Does the CEC provide notice in English
12 and Spanish for these communities?

13 PRESIDING MEMBER BYRON: Speak up,
14 please.

15 BY MS. BROSTROM:

16 Q Does the CEC provide notice in English
17 and Spanish for these particular communities for
18 this project?

19 A We provided the notice in Spanish in the
20 paper, I believe.

21 Q When did the CEC start providing notice
22 in English and Spanish?

23 A I don't exactly know.

24 Q Did the CEC provide notice in Spanish
25 from the beginning of this process?

1 A I don't know.

2 MS. BROSTROM: That's it.

3 HEARING OFFICER FAY: Okay. Anything
4 from the Sierra Club?

5 MR. ASHLEY: Yes, just a couple of brief
6 questions.

7 CROSS-EXAMINATION

8 BY MR. ASHLEY:

9 Q Mr. Douglas, --

10 THE REPORTER: Could we move the
11 microphone, the black one.

12 HEARING OFFICER FAY: And I'll have to
13 ask everybody to please speak up. It doesn't help
14 your case --

15 MR. ASHLEY: I can be much louder.

16 HEARING OFFICER FAY: Okay. It doesn't
17 help your case if the court reporter cannot pick
18 up your words.

19 MR. ASHLEY: Exactly. I understand
20 perfectly.

21 CROSS-EXAMINATION

22 BY MR. ASHLEY:

23 Q Mr. Douglas, how many additional words
24 would be necessary in a notification to inform
25 people that this project would affect air quality?

1 MS. DeCARLO: Objection, argumentative.

2 HEARING OFFICER FAY: Why don't you ask
3 a more direct question about whether they --

4 MR. ASHLEY: Okay, I will change the
5 question a bit.

6 HEARING OFFICER FAY: -- detailed the
7 air quality issues?

8 BY MR. ASHLEY:

9 Q Is it possible that you could inform
10 people about air quality in the notice with about
11 five extra words? Yes or no.

12 A Oh, I don't know if that's -- if that's
13 possible in five words?

14 Q It may not --

15 A Right now -- but if you, maybe in the
16 future we would include other things?

17 Q Just in a very very general way --

18 Q -- that's all I mean.

19 A But I believe the notice did notify
20 everybody of the situation. If we -- maybe do we
21 want to include a few more things? Maybe. That's
22 possible.

23 Q Okay.

24 A Like I said before, you know, I don't
25 know how much bigger or larger --

1 Q Well, --

2 A -- and involved these notices want to be
3 to not discourage people. And I think that's more
4 important to realize, the notices. But I take
5 your point.

6 MR. ASHLEY: Thank you. That's all.

7 HEARING OFFICER FAY: All right. Any --

8 MR. SIMPSON: Can I have just three more
9 questions?

10 HEARING OFFICER FAY: No. Any redirect?

11 MS. DeCARLO: A couple questions on
12 redirect.

13 REDIRECT EXAMINATION

14 BY MS. DeCARLO:

15 Q Mr. Douglas, in all notices issued by
16 staff for this proceeding, did they contain your
17 email address and your telephone number for those
18 interested in further information about the
19 project?

20 A Yes, they did.

21 Q And did all notices for this proceeding
22 also contain a website address that referenced the
23 staff documents, as well as other documents
24 available to the public, should they be interested
25 in more detail about the project?

1 A Yes, they did.

2 Q And during staff workshops does staff
3 keep a list for people to sign in and indicate
4 their contact information if they wish to receive
5 notices of further staff workshops or documents?

6 A Yes, correct.

7 MS. DeCARLO: That's all.

8 HEARING OFFICER FAY: Okay, thank you.

9 Can we go off the record.

10 (Off the record.)

11 HEARING OFFICER FAY: We'll go back on
12 the record.

13 PRESIDING MEMBER BYRON: The reason I
14 asked Ms. Miller to come forward, she's our Public
15 Adviser. And she was not in the employ of the
16 Energy Commission when this proceeding began. And
17 I just wanted to check with her on how comfortable
18 she was answering some questions. And she's
19 agreed to answer some questions about the
20 noticing.

21 Whereupon,

22 ELENA MILLER

23 was called as a witness herein, and after first
24 having been duly sworn, was examined and testified
25 as follows:

1 THE REPORTER: Please state and spell
2 your name for the record.

3 THE WITNESS: Elena Miller, E-l-e-n-a
4 M-i-l-l-e-r.

5 PRESIDING MEMBER BYRON: I'll ask just a
6 couple of questions, if I may, Ms. Miller. I
7 attended the original site visit, I think it was
8 in May of last year. And a presentation was given
9 to us at the time with regard to where the
10 documents were made available.

11 I note here the public libraries in
12 Avenal, Hanford, Lemoore, Kettleman City,
13 Stratford, Coalinga and then other places where we
14 have public offices throughout the state.

15 EXAMINATION

16 BY PRESIDING MEMBER BYRON:

17 Q I guess I just wanted to -- I'm always a
18 little bit concerned when folks raise questions
19 about the effort that this Commission makes,
20 particularly our Public Adviser, to notice these
21 meetings.

22 Could you give a brief description of
23 your knowledge of what transpired with regard to
24 noticing?

25 A Certainly. You're correct in that I was

1 not at the original site visit and informational
2 hearing. I think it's appropriate that I explain
3 the difference, also, Commissioner, in what my
4 office does in terms of outreach and noticing that
5 is separate and distinct from the noticing that is
6 done by our siting and transmission office, as
7 well as our hearing office. We are separate
8 offices and we each perform our own form of
9 outreach.

10 And so let me start from the beginning
11 and respond to a question that was raised earlier
12 from an intervenor with respect to what type of
13 outreach was done at the beginning of the case for
14 the site visit and informational hearing.

15 There was a gentleman that is no longer
16 with my office. His name is Nick Bartsch,
17 B-a-r-t-s-c-h. He has since retired from the
18 Commission.

19 He did attend the informational hearing
20 and site visit. And he did present, on behalf of
21 the Public Adviser's Office, for the role of
22 explaining that the Public Adviser's Office exists
23 and what we do to help the public in terms of
24 participation.

25 His presentation may, and likely,

1 included an explanation to those individuals that
2 were in the room, that a copy of the application
3 for certification, or AFC, was available for the
4 public to go and view at multiple libraries. You
5 just mentioned a number of them.

6 And that is correct. People can go in
7 the library and review the document. They can
8 also contact the Public Adviser's Office and
9 receive a copy of it if they have any limitations
10 of going to a library, or any computer limitations
11 in terms of internet access. Because it is, of
12 course, also available on the Commission's
13 website. That would have been explained to people
14 at that informational hearing and site visit.

15 What also would have been explained is
16 the role of the Public Adviser's Office to assist
17 people in the different -- there are two levels of
18 participation.

19 Now, in terms of the original site visit
20 and informational hearing the hearing office sends
21 out notices, the siting office sends out notices.
22 Those are statutorily required.

23 The noticing that is done, or the
24 outreach I'll call it, that is done by the Public
25 Adviser's Office is for purposes of setting out a

1 wider net. In other words, regulations guide us
2 in who needs to be noticed. Most common example
3 would be property owners in an area.

4 The Public Adviser's Office, however,
5 does not notice property owners. I work with them
6 often because they contact my office after seeing
7 my name or the Public Adviser's telephone number
8 and email. They will contact our office about a
9 particular proceeding.

10 The type of outreach that my office does
11 is to the local areas. And we're not limited in,
12 for example in this case, noticing only Avenal.
13 And, indeed, we did not just notice Avenal. We
14 noticed schools, churches, local people to an area
15 outside. And there's no limit.

16 What our practice is, is that we request
17 maps so that we can become familiar of the areas
18 around a project. And though the applicants may
19 not want us to do this, we do because we feel it's
20 very important to bring people in from outlying
21 areas.

22 And so it's critical for everybody to
23 understand that this case was not just noticed in
24 Avenal. In fact, principals, school
25 administrators in Kettleman City were noticed.

1 Huron was noticed. Avenal was noticed.

2 We have included principals of schools
3 and local elected officials. Any individuals that
4 contact our office are also added to the list.
5 Our list is then made available to the siting
6 office.

7 But, again, that original site visit, to
8 go back to the point I wanted to make, there was a
9 separate notice created by my office. It's a
10 double-sided notice, English on one side, Spanish
11 on the other.

12 That would have been mailed to any of
13 these outlying area contact people that we would
14 have made. And it included the Sierra Club; it
15 included Center -- I don't know actually, let me
16 change that -- I don't know if it included Center
17 on Race, Poverty.

18 Subsequent to the original site visit
19 and informational hearing my office was contacted
20 by individual environmental groups, environmental
21 justice groups. They were then added to our list
22 based upon being contacted by them.

23 And so we've had conversations with
24 individuals. And I have to add that I am limited
25 in what I can do from my office in Sacramento.

1 And so I have been there for a year in this
2 position, a little bit longer with the Commission.

3 And my approach, so that everybody
4 understands, is to seek collaboration with
5 organizations. My office is separate and distinct
6 from what goes on in the siting office, from what
7 goes on in the hearing office, and certainly what
8 goes on in the Commissioners' offices.

9 And so I am afforded the opportunity to
10 work with people. And I, in fact, have the duty
11 to work with people and to assist them. And we've
12 done so in this case.

13 Let me see, I think that answers --

14 Q That's fine. And I know you've been
15 before this Commissioner and other Commissioners,
16 and your concerns about having sufficient funding
17 for notification.

18 However, I think your office has done an
19 excellent job in the cases that I've been involved
20 with. It's the intent of this Commissioner, I
21 believe all my fellow Commissioners, that we do as
22 good a job as we can possibly do in noticing. I
23 believe, the Commission has done that.

24 Have you noticed any irregularities in
25 the noticing in this case as opposed to the 25

1 others that we have before the Commission at this
2 time?

3 A No. No. I think this case suffers from
4 the same --

5 Q And one last question. I know that we
6 rely upon others to help us in noticing, local
7 elected officials and agencies of the state and
8 county governments and city government.

9 Do you know were others notified to
10 assist in the noticing process to make sure the
11 public was included?

12 A Yes. The notice that goes out from my
13 office has a cover letter with it. And I think
14 that the second-to-last or final paragraph in that
15 standard letter that is sent in every case says,
16 "please post this notice in a public place."

17 And if you need additional copies, for
18 example, if a principal of an elementary school
19 wants to distribute them to the students, they are
20 free to contact my office and I would make
21 hundreds of copies available, if necessary, in --

22 Q All right. You weren't here for the
23 initial hearing, but I noted at the time that
24 there was about 11 such letters that went to
25 local, state and county agencies to request their

1 assistance in notifying.

2 A Yes.

3 Q So, Ms. Miller, thank you. We probably
4 went overboard on this, but I just want to make
5 sure that the public here is aware of the efforts
6 that this Commission goes to in terms of noticing
7 these cases before us.

8 Thank you.

9 A Thank you.

10 PRESIDING MEMBER BYRON: Mr. Fay.

11 HEARING OFFICER FAY: Thank you, Ms.
12 Miller. And, of course, Ms. Miller is available
13 throughout the day to assist people in
14 participating.

15 Any further redirect, Ms. DeCarlo?

16 MS. DeCARLO: I have no further
17 questions of this witness. I would like to move
18 our exhibits into the record that we've
19 identified, if that's appropriate at this time.

20 HEARING OFFICER FAY: Okay, I just want
21 to offer --

22 MR. SIMPSON: I'm sorry, is that
23 testimony?

24 HEARING OFFICER FAY: -- recross to --

25 MS. DeCARLO: Oh, I'm sorry. For the --

1 no, no cross.

2 HEARING OFFICER FAY: -- any of the
3 parties. Applicant?

4 MS. LUCKHARDT: No.

5 HEARING OFFICER FAY: Okay.

6 MR. SIMPSON: Excuse me, was that
7 testimony?

8 HEARING OFFICER FAY: Well, Ms. Miller
9 was sworn, but the Commissioner asked her to
10 explain the noticing process that the Public
11 Adviser's Office gives.

12 And so we'll take official notice of it.
13 And I suppose it is testimony, it's part of this
14 record.

15 MR. SIMPSON: Then can we cross-examine?

16 HEARING OFFICER FAY: Well, she's not a
17 sponsored witness by any party, but I will allow
18 you some questions. But right now we're on
19 recross of this witness on only the things that he
20 said on redirect. Do you have any questions
21 regarding the redirect?

22 MR. SIMPSON: Sure.

23 RECROSS-EXAMINATION

24 BY MR. SIMPSON:

25 Q Can you tell me how many notices were

1 mailed out?

2 MS. DeCARLO: Objection, that goes
3 beyond the scope.

4 HEARING OFFICER FAY: Yeah, that was not
5 within the scope of the redirect.

6 MR. SIMPSON: Okay.

7 HEARING OFFICER FAY: So that objection
8 is sustained.

9 MR. SIMPSON: So I can ask questions?

10 HEARING OFFICER FAY: Only on the things
11 that he testified to on redirect.

12 MR. SIMPSON: Oh, okay.

13 HEARING OFFICER FAY: No further
14 questions. Anybody else? Okay.

15 All right, thank you, Mr. Douglas.

16 And go ahead, you wanted to move --

17 MS. DeCARLO: Yes. Section 1 of exhibit
18 200 and exhibits 201 and 202. And section 1 is
19 just the executive summary of the final staff
20 assessment.

21 HEARING OFFICER FAY: Any objection?
22 All right. Hearing none, those are entered into
23 the record at this point. And we thank Mr.
24 Douglas for his testimony.

25 Off the record.

1 (Off the record.)

2 CROSS-EXAMINATION

3 BY MR. SIMPSON:

4 Q Sorry. You mentioned that the applicant
5 may not want you to provide this notice? Why
6 would that be?

7 A Well, --

8 MS. LUCKHARDT: I object. That question
9 is argumentative and it assumes that the applicant
10 has a certain position in this proceeding which
11 has not been established.

12 HEARING OFFICER FAY: That was probably
13 speculation on Ms. Miller's part. If you've got a
14 more specific question, you --

15 MR. SIMPSON: Sure.

16 BY MR. SIMPSON:

17 Q The form and content of your notices,
18 are they different than the notices we've already
19 seen?

20 A They are created by my office. They
21 take -- the source of the information is the same.
22 But they are created by my office alone. And so,
23 yes, they are different.

24 Q Are they posted on the CEC website?

25 A I don't know that the original site

1 visit notice from my office in this case was
2 posted on the website. I don't know.

3 Q I see. Can you tell me how many notices
4 went out?

5 A I don't know the number.

6 Q Is there a way we could find that out?

7 A No. And the reason is that there may
8 have been instances that I am not aware of, of
9 individuals contacting my office and asking for
10 additional copies for distribution.

11 Q An estimate maybe? Ten or 1000?

12 A I have no way of knowing.

13 Q No estimate? Am I on your list?

14 A You're not on my list for this case, but
15 you are on a list for this case.

16 Q Okay, so you didn't send any notice to
17 me?

18 A I didn't send the notices out for the
19 site visit or informational hearing for this case.
20 I wasn't -- as the Presiding Member explained, I
21 wasn't on the case at the beginning.

22 Q I notice that the other notices that
23 went out don't mention any opportunity to
24 intervene. Do your notices include any mention of
25 opportunity to intervene?

1 A They say that if you need assistance
2 with participation to contact the Public Adviser's
3 Office.

4 Q Thank you.

5 A You're welcome.

6 HEARING OFFICER FAY: Okay.

7 MS. BROSTROM: Just one question.

8 HEARING OFFICER FAY: Yes. Briefly.

9 CROSS-EXAMINATION

10 BY MS. BROSTROM:

11 Q In response to Mr. Byron's question on
12 whether or not this process was the same as the
13 other 20-something processes before the CEC, and
14 you had started a statement saying that this
15 process suffers from the same. And I was
16 wondering if you could complete that sentence.

17 A We do a lot to notice cases. And this
18 case, like so many others, does not get enough of
19 a response at the beginning of a case. We get
20 more response at the end of the cases.

21 And so I was going to comment on the
22 fact that we get more interest and participation
23 at the end of cases than we do at the beginning of
24 cases.

25 HEARING OFFICER FAY: All right,

1 anything further? Thank you very much, Ms.
2 Miller. Appreciate your help in clarifying that.

3 All right, at this time, are there any
4 further questions from the Committee? Okay. Or
5 comments?

6 We would like to move into the topic of
7 greenhouse gases, take evidence on that. And this
8 is a new area for the Commission and for the state
9 because of new legal requirements and new
10 concerns.

11 And so we have focused on analyzing this
12 project in light of greenhouse gas emissions and
13 the impact that this project may have on them.

14 So we would like to begin with the
15 applicant's panel. And I'd ask counsel to
16 identify the witnesses so we can swear the panel.

17 MS. LUCKHARDT: The applicant calls
18 Jimmy Rexroad, Rick Lauckhart and Gary Rubenstein.
19 Mr. Rexroad has previously been sworn, but Mr.
20 Rubenstein and Mr. Lauckhart need to be sworn.

21 HEARING OFFICER FAY: Please stand.
22 Whereupon,

23 JIM REXROAD
24 was recalled as a witness herein, and having been
25 previously duly sworn, was examined and testified

1 further as follows:

2 Whereupon,

3 GARY RUBENSTEIN and RICHARD LAUCKHART
4 were called as witnesses herein, and after first
5 having been duly sworn, were examined and
6 testified as follows:

7 THE REPORTER: Please state and spell
8 your names for the record.

9 MR. LAUCKHART: My name is Richard
10 Lauckhart, L-a-u-c-k-h-a-r-t.

11 MR. RUBENSTEIN: My name is Gary
12 Rubenstein. That's G-a-r-y R-u-b-e-n-s-t-e-i-n.

13 MS. LUCKHARDT: Okay, now I'm going to
14 begin and go through one by one, at least
15 initially.

16 DIRECT EXAMINATION

17 BY MS. LUCKHARDT:

18 Q So, Mr. Rexroad, were a statement of
19 your qualifications attached to your testimony?

20 MR. REXROAD: Yes.

21 MS. LUCKHARDT: And I'm going to split
22 out our previously filed list of exhibits where
23 greenhouse gas and air quality were included
24 together. And so the exhibits that you're
25 sponsoring on greenhouse gas, would those include

1 the following sections of exhibit 1? That would
2 be section 6.2.4.1.2 and page 6.2.5.1.2, which
3 provides the facility emissions of greenhouse
4 gases.

5 Section 6.2.7.2, which provides a
6 cumulative impact analysis for greenhouse gas.
7 And appendix 6.2-1. As well as exhibit 17(a),
8 exhibit 19(a), responses 1 through 3. Exhibit 23,
9 exhibit 25(c) and exhibit (26)?

10 MR. REXROAD: Yes.

11 MS. LUCKHARDT: Do you have any
12 corrections to your testimony at this time?

13 MR. REXROAD: Not at this time.

14 MS. LUCKHARDT: Insofar as your
15 testimony contains statements of fact, are those
16 facts correct to the best of your knowledge?

17 MR. REXROAD: Yes.

18 MS. LUCKHARDT: Insofar as your
19 testimony contains statement of opinion, do they
20 represent your best professional judgment?

21 MR. REXROAD: Yes.

22 MS. LUCKHARDT: Do you now adopt those
23 exhibits as your sworn testimony?

24 MR. REXROAD: I do.

25 MS. LUCKHARDT: And moving to Mr.

1 Lauckhart, was a statement of your qualifications
2 attached to your testimony?

3 MR. LAUCKHART: Yes.

4 MS. LUCKHARDT: And are you sponsoring
5 exhibit number 23?

6 MR. LAUCKHART: Yes, that's correct.

7 MS. LUCKHARDT: And do you have any
8 corrections to your testimony at this time?

9 MR. LAUCKHART: No, I do not.

10 MS. LUCKHARDT: And insofar as your
11 testimony contains statements of fact, are those
12 facts correct to the best of your knowledge?

13 MR. LAUCKHART: Yes, they are.

14 MS. LUCKHARDT: And insofar as your
15 testimony contains statement of opinion, do they
16 represent your best professional opinion?

17 MR. LAUCKHART: Yes, they do.

18 MS. LUCKHARDT: And do you adopt exhibit
19 23 as your sworn testimony?

20 MR. LAUCKHART: Yes.

21 MS. LUCKHARDT: Thank you. And moving
22 on to Mr. Rubenstein. Was a statement of your
23 qualifications attached to your testimony?

24 MR. RUBENSTEIN: Yes, it was.

25 MS. LUCKHARDT: And I'm going to go

1 through and list the exhibits that I believe
2 you're sponsoring. You can tell me if that is
3 correct.

4 Exhibit 1, it would be section
5 6.2.4.1.2; it would be page 6.2.5.1.2. I believe
6 these are all out of the air quality section.
7 Section 6.2.7.2, and appendix 6.2-1.

8 Exhibit 17(a); exhibit 19(a) responses 1
9 through 3; exhibit 23(c) and exhibit 26.

10 MR. RUBENSTEIN: That's correct.

11 MS. LUCKHARDT: And do you have any
12 corrections to your testimony at this time?

13 MR. RUBENSTEIN: No, I do not.

14 MS. LUCKHARDT: And insofar as your
15 testimony contains statements of fact, are those
16 facts correct to the best of your knowledge?

17 MR. RUBENSTEIN: Yes, they are.

18 MS. LUCKHARDT: And insofar as your
19 testimony contains statement of opinion, do they
20 represent your best professional judgment?

21 MR. RUBENSTEIN: Yes, they do.

22 MS. LUCKHARDT: And do you now adopt all
23 those exhibits as your sworn testimony?

24 MR. RUBENSTEIN: Yes, I do.

25 MS. LUCKHARDT: And then at this time I

1 would like to ask Mr. Rexroad if he could please
2 briefly summarize his testimony regarding
3 greenhouse gas emissions.

4 MR. REXROAD: Yes, the Avenal Energy
5 project, as we've conducted the analysis, suggests
6 that at the very worst case for this project it
7 would be with regards to greenhouse gases, a
8 neutral impact to the overall greenhouse gas
9 emissions to California.

10 And will likely, as a result of it's
11 potential construction result in a substantial
12 reduction in the total greenhouse gases associated
13 with electricity consumption in the state of
14 California.

15 That's largely as a result of the
16 facility that is more efficient in terms of
17 generating electricity than many of the existing
18 generation facilities within the state of
19 California. As well as being able to displace a
20 wide variety of coal facilities for which the
21 state is working to move away from.

22 MS. LUCKHARDT: Thank you. And there
23 seems to be some confusion sometimes about the
24 difference in certain types of electricity. So
25 I'm wondering if you could provide just a brief

1 description of the differences between capacity
2 and energy, and how that relates to a gas-fired
3 power plant.

4 MR. REXROAD: Yes. The electricity
5 system requires really two components to provide
6 for a reliable supply of energy to the consumers.
7 First is capacity. That's the existence of a
8 generation facility. Those typically cover a wide
9 range of types of technologies. Everything from
10 solar and wind energy in the renewable space, all
11 the way to coal generation facilities.

12 They exist to provide for the stability
13 of the grid, the electricity grid, as well as in
14 the event of various crises within the system, or
15 emergencies within the system that that capacity
16 is available to step in and provide energy as the
17 grid demands as demand requires.

18 Energy coming from the various
19 facilities is dispatched largely on an economic
20 basis or on a basis of need. Solar and renewable
21 projects having a very low cost of variable to
22 produce, dispatched first, or under their must-
23 take contracts.

24 As gas plants and other technologies
25 farther up the dispatch curve in terms of variable

1 costs to produce, as demand increases the higher
2 and higher up the supply stack those facilities
3 are turned on to generate energy to actually be
4 delivered to the consumers.

5 MS. LUCKHARDT: And just to kind of
6 narrow it down, when you're talking about how does
7 a gas plant fit into the mix of generation needed
8 to support the grid in the near and medium term?

9 MR. REXROAD: Typically within the
10 generation structure in California there's the
11 renewable sources that are dispatched first within
12 the system. Those are providing largely energy
13 and very little capacity, due to the available
14 renewable resource, either the sun or the wind, in
15 terms of when the wind blows or the sun shines.

16 But when that energy is available it is
17 dispatched to the grid. It's typically dispatched
18 first. Hydro facilities fall into that, as well.
19 Very low variable cost to produce.

20 The fossil fuel plants, in terms of
21 natural gas plants, are typically the next on the
22 list due to the lower cost of -- I'm sorry, coal
23 plants are typically next on that list due to the
24 very low cost of the fuel supply.

25 And then natural gas plants, depending

1 -- combined cycle plants such as this, come next
2 in the list. And then finally peakers would come
3 as their variable cost to produce is greater.

4 With the advances of the state of
5 California's desire to move more towards renewable
6 energy and reduce the greenhouse gas emissions,
7 what we've found is that the natural gas plants
8 are actually, particularly combined cycle plants,
9 can fill much more of a role than just simply
10 where they fall on the economic supply stack with
11 regards to being able to provide such things as
12 spinning reserve, grid reliability in terms of VAR
13 support, those kinds of things that keep the grid
14 stable. Rapid response or load following to
15 accommodate when the renewable sources are not
16 available.

17 So, a natural gas plant within the
18 California grid is becoming somewhat more
19 important as the older plants start to be shut
20 down, and as we move more and more into renewables
21 that do not provide a substantial amount of
22 capacity to the system. And are largely not able
23 to respond base to load, rather simply base to
24 what renewable resources are available at the
25 time.

1 MS. LUCKHARDT: And then could you
2 please describe over what time period power plants
3 of this type and size usually recover their
4 initial investment?

5 MR. REXROAD: Typically natural gas
6 plants have an economic life, or in terms of how
7 long they take to recover the investment of the
8 shareholders, somewhere between 10 and 20 years is
9 how long it would take to recover the investment,
10 itself. That's the answer.

11 MS. LUCKHARDT: And then could you
12 please describe what are the advantages of placing
13 a gas-fired power plant at this particular
14 location?

15 MR. REXROAD: This type of facility,
16 combined cycle facility, provides a number of
17 benefits in this particular location. By nature
18 of its point of interconnection into the
19 transmission system it's quite capable of
20 providing both capacity and energy to both
21 northern California and southern California, both
22 major independent or -- Southern California Edison
23 and PG&E, both purchase energy from this plant.

24 Without substantial transmission system
25 constraints the system is capable of providing

1 that. So we can meet energy needs as well as
2 capacity.

3 This facility, by virtue of its
4 supplemental firing, is able to provide a certain
5 amount of reserve margin; in some cases,
6 potentially spinning reserve. And in all cases,
7 some type of reserve margin, which in parlance of
8 California meets resource adequacy needs.

9 There's some question of what amount of
10 resource adequacy this facility could provide.
11 But in California there are two types, local
12 resource adequacy and regional resource adequacy.
13 And this plant can definitely provide some
14 resource adequacy needs for both northern and
15 southern utilities.

16 The structure of the facility, or the
17 design of the facility provides for a relatively
18 rapid start capability. When the plant is in sort
19 of a, in a hot condition after shutdown, the plant
20 can be started back up and reach full power
21 within, in less than two hours. And traditionally
22 that's something materially less than two hours,
23 typically in the 90-minute range, it is, in some
24 cases, possible.

25 And the auxiliary or the supplemental

1 firing can be turned on when the plant is
2 operating immediately. And reach full load very
3 quickly. So that's 100 megawatts of the total
4 600.

5 So we've talked about reliability; we've
6 talked about energy and capacity. And we've
7 talked about the ability to load follow, which
8 means the design of the plant allows for, as other
9 generation sources or the load either increases or
10 decreases due to, you know, various weather events
11 or various ambient conditions, this plant can
12 automatically follow that load.

13 So that in the event that, for example,
14 a cloud cover to solar field, either in the
15 Carissa Plain or somewhere in that area, this
16 plant could actually step in and load follow to
17 pick up the load that that plant would have
18 normally provided almost instantaneously.

19 So we can load follow. We can meet
20 energy and capacity needs. We can rapidly start
21 to provide a reserve margin for the grid. And we
22 can provide relatively efficient energy as
23 compared to some of the aging facilities in
24 California, and substantially more efficiently
25 with lower per-megawatt-hour emissions than say a

1 peaker plant, even.

2 MS. LUCKHARDT: And what are the
3 advantages of licensing a project and permitting a
4 project prior to receiving a contract?

5 MR. REXROAD: There's really two ways
6 that a merchant developer can develop a plant.
7 You can either go out and get a contract from a
8 local utility or some other energy purchaser prior
9 to starting the licensing process. Or you can do
10 it after the licensing process.

11 We've elected to do it following the
12 licensing process primarily so that we can clearly
13 define the environmental costs and the licensing
14 costs of the project.

15 Typically if you start and get a
16 contract before you start licensing, then you may
17 have to go back and renegotiate that contract
18 because you didn't properly anticipate what the
19 potential impacts of that licensing process would
20 be. And, in fact, you know, we -- no, that's all.

21 MS. LUCKHARDT: Okay. And then in your
22 opinion, do we have enough information now to
23 determine which particular facilities at which
24 particular locations would be needed to support
25 the integration of 33 percent or higher renewables

1 to achieve the greenhouse gas reductions
2 identified by AB-32?

3 MR. REXROAD: I don't think you can
4 really effectively figure out what resources will
5 be needed in what locations, largely because
6 you're not sure what resources will largely get
7 constructed in what locations.

8 And additionally, it's very difficult to
9 anticipate what the load requirements will be as
10 you move forward. In particular, if you were to
11 construct a substantial amount of wind energy in
12 the Tehachapi region, that would require one set
13 of resources other than that wind to meet the
14 various grid reliability and energy needs.

15 But if you were to build a large amount
16 of, or an equivalent amount of solar in the Mojave
17 Desert, that would require an entirely different
18 set of facilities to meet the ongoing needs of the
19 grid.

20 So, really it becomes a question of
21 trying to anticipate as many different scenarios
22 as possible, and placing plants in as many
23 different locations to meet the growing need as
24 possible.

25 MS. LUCKHARDT: And then can you explain

1 what you were trying to show with the Black and
2 Veatch study?

3 MR. REXROAD: The Black and Veatch
4 study, we were moving through this process and
5 recognized that we needed to understand what the
6 greenhouse gas implications of the project were.

7 And some other reports that had been
8 announced as coming out were not available. In
9 particular, the MRW report. We commissioned the
10 Black and Veatch report largely to demonstrate
11 that installation of this facility in this
12 location with this set of efficiency parameters
13 would demonstrate, all other parameters equal,
14 injection or installation of this facility would
15 show that it was a net improvement to the
16 greenhouse gas profile of the California energy
17 system.

18 HEARING OFFICER FAY: Excuse me,
19 counsel. What exhibit number is that?

20 MR. REXROAD: I'm sorry, -- MRW report
21 is exhibit 23.

22 MS. LUCKHARDT: Oh, no, the Black and
23 Veatch report is exhibit 23. The MRW report is
24 the one that you took official notice of.

25 HEARING OFFICER FAY: Yes.

1 MS. LUCKHARDT: That is the Framework
2 for Evaluating Greenhouse Gas Implications of
3 Natural Gas-Fired Power Plants in California.

4 HEARING OFFICER FAY: Right. Thank you.
5 I just -- I wanted that number on the Black and
6 Veatch study. Thank you.

7 MS. LUCKHARDT: And then what are the
8 overall conclusions of the Black and Veatch
9 report?

10 MR. REXROAD: Several conclusions came
11 from the report. The main one is that from this
12 facility, on average, it would result in, as on
13 average, approximately 460,000 short tons per year
14 of greenhouse gas reduction in the state of
15 California, associated with the construction of
16 this facility and no other changes to the system,
17 other than sort of the assumptions that went into
18 the model, itself, which we used, which were
19 consistent between both data runs. And Mr.
20 Lauckhart can explain in more detail what those
21 assumptions were.

22 In addition it showed that there was
23 also an improvement to the entire western
24 interconnect. The WECC region also benefits in a
25 net reduction in total greenhouse gas emissions

1 from the construction of this facility, as well.

2 MS. LUCKHARDT: Okay. Turning to Mr.
3 Rubenstein for a moment. Can you summarize why
4 you agree with the staff's conclusions contained
5 in the final staff assessment section on
6 greenhouse gas?

7 MR. RUBENSTEIN: Yes. The staff's
8 conclusion in the FSA is that the Avenal Energy
9 project would lead to a net reduction in
10 greenhouse gas emissions associated with
11 production of electricity serving the California
12 market.

13 I agree with that conclusion.
14 Fundamentally, I think when answering this
15 question you have to start with the very logical
16 premise that power plants do not create a demand
17 for electricity. Power plants satisfy demand for
18 electricity that is created through other ways.
19 From population growth, from new manufacturing
20 facilities. But power plants, in and of
21 themselves, don't create a demand for electricity.

22 In evaluating whether a particular plant
23 is going to increase or decrease greenhouse gas
24 emissions, I think you have to ask the fundamental
25 question of whether the new plant produces

1 greenhouse gas emissions for every megawatt hour
2 of electricity produced.

3 I think that the key elements of that
4 assessment would include answering the following
5 three questions: Will the new plant displace
6 generation from higher carbon-generating
7 resources. Second, will the new plant facilitate
8 the introduction of lower carbon-generating
9 resources into the grid. And third, does the new
10 plant use the most efficient generating
11 technologies that are available.

12 I think that the analysis that was done
13 by Black and Veatch, as well as the analysis that
14 was done by the staff, and the analysis contained
15 in our testimony, clearly indicate that for the
16 Avenal Energy project the answer to all three of
17 those questions is yes.

18 I know that I read some document
19 suggesting that the Avenal Energy project will
20 increase greenhouse gas emissions. But frankly, I
21 do not see how that is physically possible.

22 At the absolute worst case, this plant
23 would be built and never run, because it would not
24 displace less efficient generation. In which
25 case, it will generate no emissions, including no

1 greenhouse gas emissions. And that is the worst
2 case.

3 Any other scenario that one would look
4 at results in a net decrease in greenhouse gas
5 emissions.

6 MS. LUCKHARDT: And, Mr. Rubenstein, did
7 you read the comments of Mr. Simpson related to
8 the use of quick-start technology in the context
9 of greenhouse gas emissions?

10 MR. RUBENSTEIN: Yes, I did. And in his
11 comments he suggested somehow that the project's
12 failure to use a quick-start technology is somehow
13 inconsistent with the state's greenhouse gas
14 objectives.

15 I disagree with that for a couple of
16 reasons. First of all, as indicated in the MRW
17 report -- and these are conclusions with which I
18 agree -- there are several roles that a gas-fired
19 power plant can play and needs to play in
20 California's electricity grid.

21 Not all of those roles require quick-
22 start technology. And obviously the role that
23 this plant is designed for is one of those other
24 roles. It is not designed to be a peaking
25 facility.

1 Second, and perhaps equally important,
2 is the fact that this plant is designed for what
3 you might call quicker-start technology, which is
4 to say it uses an auxiliary boiler to enable it to
5 be started within approximately two hours for most
6 types of starts. A true cold start will not be as
7 quick as with the rapid-start technologies. But
8 it is a step along the way, and it's an important
9 step because of the third point.

10 The third point is that the true quick-
11 start technologies, those are the technologies in
12 which the combustion turbine startup times are
13 effectively decoupled from the heat recovery steam
14 generator and the steam turbine, so that a plant
15 can achieve roughly 50 percent load within a
16 matter of 20 to 30 minutes.

17 Those technologies are inherently
18 slightly less efficient than the combined cycle
19 technology that's proposed here.

20 And while that efficiency penalty is
21 maybe 1 or 2 percent, if you have a plant that you
22 expect to run a fair amount of the time, then I
23 think there's a legitimate question about whether
24 the tradeoff is appropriate for the true quick-
25 start technology, as opposed to the technology

1 that's proposed here.

2 There is certainly a role for plants
3 with a true quick-start technology. But they're
4 intended to serve a different one of the purposes
5 laid out in the MRW report. And you physically
6 can't design a plant that achieves all of the
7 objectives for all the different plant designs,
8 and have it make sense either economically or from
9 an efficiency perspective.

10 You have to design a plant to meet a
11 particular need. And I think that this plant is
12 appropriately designed to meet the need that it's
13 focused on, which is not serving as a peaking
14 plant, not serving as a plant that can start up
15 within 30 minutes. But rather a plant that's
16 expected to run a moderate amount of time and can
17 serve a variety of generational and reliability
18 needs with reasonably quick-starting capability.

19 MS. LUCKHARDT: And switching again to
20 Mr. Rexroad, there's been a concern raised about
21 gas-fired generation potentially crowding out
22 renewable generation's access to the transmission
23 system. Can you talk about that issue for me?

24 MR. REXROAD: Yes. The interconnection
25 process in California is governed by the

1 California ISO. And that process is open to
2 really any interconnection applicant in a very
3 precise set of rules that simply convey the right
4 to interconnect to the system.

5 So, by virtue of my interconnection
6 process I have no -- that interconnection does not
7 convey a right to use the transmission system. So
8 in the event that a renewable project were to
9 interconnect at the very same place in the grid,
10 then they would have the same interconnection
11 rights that I would have. That study process
12 would be the same study process that I'm going
13 through.

14 And then the right to use the
15 transmission capacity that exists within that
16 system today, or as a result of the various
17 upgrades that may be installed so that the various
18 plants could interconnect to the system would be
19 conveyed to that resource that was being
20 dispatched first within the process.

21 So that the fact that a renewable energy
22 project would have a lower variable cost to
23 produce, it would be dispatched first and it would
24 use the transmission capacity or have the rights
25 to use transmission capacity before me.

1 And then I would have the right higher
2 in the dispatch curve, with higher costs to
3 produce, then I would be able to use whatever sort
4 of transmission capacity was actually left in the
5 system to deliver, as opposed to the other way
6 around based on the current Cal-ISO tariffs and
7 interconnection procedures.

8 MS. LUCKHARDT: And, Mr. Rubenstein, the
9 Center on Race, Poverty and the Environment raised
10 a concern in their petition to intervene in this
11 proceeding that new fossil generation is not
12 needed.

13 After your review of the California
14 electric system, and the MRW report, do you agree
15 with that statement?

16 MR. RUBENSTEIN: Absolutely not. We
17 have, in California, today, over 20,000 megawatts
18 of generating capacity that depends on once-
19 through ocean cooling, which, in an ongoing
20 proceeding, I believe it's the State Water
21 Resources Control Board, hopes to replace with
22 other generating technologies or other cooling
23 technologies.

24 We have, in this state, over 17,000
25 megawatts of what I refer to as legacy, oil- and

1 gas-fired generating plants, that are over 40
2 years old. There's some overlap between those two
3 numbers because some of those also use once-
4 through cooling.

5 It is clear to me that somewhere between
6 20,000 and 30,000 megawatts of generating capacity
7 are going to have to be replaced over the next 10
8 to 20 years even just to stay where we are.

9 Some of that replacement will come in
10 the form of energy conservation. But we already
11 have one of the most aggressive energy
12 conservation programs in the country.

13 And while we can certainly do more, I've
14 never seen a study to suggest that we could
15 replace all of that soon-to-be-lost capacity with
16 energy conservation.

17 We will certainly be seeing more in the
18 way of renewable energy resources to address the
19 state's 33 percent renewable portfolio standard.

20 But, again, I've not seen anyone suggest
21 that those technologies could completely replace
22 the capacities. And, in addition, replace the
23 roles that those plants provide. Whether those
24 roles are seasonal operations when other plants
25 are shut down, or spinning reserve during summer

1 nights.

2 The types of renewable technologies
3 we're talking about don't have those capabilities.
4 It's clear to me there will always be -- not
5 always, but at least for the foreseeable future,
6 for at least the next 30 years, there's clearly
7 going to be a role and a need for new gas-fired
8 generation in California.

9 That does not answer the question of
10 exactly what type of generating technology it
11 should be, and exactly where it should be located.

12 And I agree completely with Mr.
13 Rexroad's comments that it's important for the
14 state's electricity purchasers to know that there
15 are different types of plants that are available
16 to be built to serve their needs that have fully
17 been vetted through the environmental process.

18 One way or another we're going to need
19 some kind of gas-generation technology to serve a
20 variety of different types of needs. And I think
21 it would be a serious mistake to wait until we
22 decide exactly where that plant needs to be
23 geographically, what type of technology it needs
24 to be, and then start an environmental review
25 process that may or may not lead to a successfully

1 licensed plant.

2 MS. LUCKHARDT: And then turning to Mr.
3 Lauckhart. I just would like to ask you a quick
4 question. You did an analysis of this project as
5 a combined cycle project. If this project instead
6 were a peaking facility, what would you anticipate
7 the greenhouse gas benefits to look like in
8 comparison to the study that you did?

9 MR. LAUCKHART: Yes, our study really
10 stacked up this plant and its heat rate against
11 other plants and coal-fired plants and their coal
12 costs and gas prices here.

13 And it found with this plant with this
14 heat rate it was going to run around 70 percent
15 capacity factor, which means it's displacing units
16 that were less efficient and therefore reducing
17 greenhouse gases.

18 And if we were to put a peaker in there,
19 and we do a lot of work studying peakers, it would
20 have run, in our study, about 3 or 4 percent of
21 the time instead of 70 percent of the time. So it
22 could have provided some capacity, but would not
23 have had nearly as a great a reduction in the
24 greenhouse gas emissions.

25 MS. LUCKHARDT: Thank you. And then

1 I'll just ask Mr. Rexroad if you can just provide
2 a brief summary of how this particular project
3 would help California meet its greenhouse gas
4 goals.

5 MR. REXROAD: Yes, I think the project
6 serves, provides, we've spoken of a number of the
7 opportunities for this project to help facilitate
8 the state's goals. We've talked briefly about its
9 ability to provide efficient energy to the grid
10 system, displacing less efficient, older
11 facilities.

12 As Mr. Rubenstein has discussed, some of
13 those are once-through facilities that are older,
14 as well. So we'll be able to supplant many of
15 those.

16 The facility's ability to start
17 relatively quickly allows the ability to step in
18 and provide a quick response. I won't say fast
19 response, but quick response to varying changes in
20 renewable resource due to either wind conditions
21 or weather conditions.

22 The facility can also provide grid
23 reliability requirements in terms of VAR support
24 and capacity to meet, again, the needs of the grid
25 system should those renewable resources not be

1 available for some reason.

2 And then finally, the load following
3 capability of the facility means that as the load
4 changes instantaneously we'll be able to -- this
5 plant, the load changes and/or the renewable
6 resources available to meet that load change due
7 to ambient conditions, this plant can step in on a
8 more instantaneous basis or a very rapid basis
9 with regards to the supplemental firing.

10 All of those things lead to the ability
11 to facilitate the substantially more renewable
12 generation in and around this facility, and in
13 addition to that, throughout the state of
14 California, by its ability of adding that 600
15 megawatts of capacity to the system, which should
16 translate to substantially more renewable
17 resources in the region.

18 A good example is the Carissa Plain.
19 Much of that is solar facilities. They will be
20 susceptible to a wide variety of capacity factors
21 throughout the year. And this facility would
22 likely be able to directly assist those facilities
23 in sustaining the load that they're trying to
24 serve.

25 And, in fact, may actually facilitate

1 more renewable development in that region because
2 there is a large robust gas plant here that can
3 provide relatively efficient energy and grid
4 services as those facilities require.

5 MS. LUCKHARDT: And what is it about
6 this gas plant that allows it to adjust to changes
7 in technology, changes in fuel sources as the
8 state moves forward?

9 MR. REXROAD: There's a couple of -- by
10 nature of the gas turbine technology, I mean we've
11 heard that there's a desire to put a number of
12 biogases into the pipeline system and distribute
13 those throughout the state.

14 In short, if it can go into that
15 backbone pipeline system, then we can burn it in
16 that turbine.

17 This particular technology would be
18 capable, should the engineering subsequently prove
19 that it's viable, be able to support solar
20 augmentation, solar-thermal augmentation. So that
21 some time in the future should someone wish to
22 build a solar field immediately adjacent to the
23 facility, this facility could take that steam and
24 use it in the facility to supplant the
25 supplemental firing.

1 Additionally, this facility, if you look
2 at many of the technologies around carbon capture,
3 gas turbines are the underlying technology that
4 many facilities are attempting to start out with
5 as the ultimate generating source for many of the
6 carbon capture processes. IGCC, integrated gas
7 combined cycle facilities, as an example. I think
8 the Commission has one of those before them now,
9 in fact. Gas turbine technology is where those
10 processes are using as their base, so.

11 MS. LUCKHARDT: Thank you. I have no
12 further questions. This panel is available for
13 cross.

14 HEARING OFFICER FAY: Okay. Would you
15 like to move those exhibits into the record at
16 this time?

17 MS. LUCKHARDT: Sure. At this time I'd
18 like to move the following sections of exhibit 1:
19 Section 6.2.4.1.2, page 6.2.5.1.1, section
20 6.2.7.2, appendix 6.2-1, exhibit 17(a), exhibit
21 19(a), data responses 1 through 3, exhibit 23,
22 exhibit 25(c) and exhibit 26.

23 HEARING OFFICER FAY: Is there any
24 objection?

25 MR. SIMPSON: Yes. The intervention

1 order that I have, number 10, says the Executive
2 Director or her designee shall insure that
3 petitioners are immediately provided with a copy
4 of the application for certification.

5 I never received a copy of the AFC, and
6 I don't think the other intervenors did, either.
7 So I object to the AFC being introduced.

8 HEARING OFFICER FAY: Okay. Do you have
9 access to a computer?

10 MR. SIMPSON: Yes.

11 HEARING OFFICER FAY: Online?

12 MR. SIMPSON: Yes.

13 HEARING OFFICER FAY: And so you do have
14 access to the Commission's website?

15 MR. SIMPSON: Yes.

16 HEARING OFFICER FAY: All right. So you
17 have had access to the AFC through the
18 Commission's website. So you're saying you did
19 not receive a hard copy?

20 MR. SIMPSON: Yes.

21 HEARING OFFICER FAY: I see. Okay.

22 MS. LUCKHARDT: Well, I'd like to note
23 that the only part of the exhibits that we have
24 sponsored that has come out of the AFC are
25 sections out of the greenhouse gas -- or out of

1 the air quality section in the AFC, as well as in
2 the appendix.

3 And I would also like to note that Mr.
4 Simpson petitioned to intervene so late in this
5 proceeding that -- he was granted his petition to
6 intervene after the applicant filed all their
7 testimony in this proceeding.

8 MR. SIMPSON: And what I'm referring to
9 is item 10 on that order that allows me to
10 intervene.

11 MS. LUCKHARDT: And I think that his
12 concern actually is unrelated to our request to
13 admit our evidence into the record.

14 HEARING OFFICER FAY: Yes. And you're
15 saying that because you did not receive a copy of
16 the AFC, that's the basis for your objection?

17 MR. SIMPSON: This objection, yes.

18 HEARING OFFICER FAY: All right. But
19 you've told me you had an opportunity to review
20 these exhibits?

21 MR. SIMPSON: Yes.

22 HEARING OFFICER FAY: Okay. So this is
23 a detail objection.

24 MR. SIMPSON: It's -- well, it's --

25 HEARING OFFICER FAY: You're not saying

1 that you literally were not --

2 MR. SIMPSON: I don't have a copy of the
3 AFC.

4 HEARING OFFICER FAY: But you --

5 MR. SIMPSON: Item 10 says --

6 HEARING OFFICER FAY: -- have the
7 capacity to review the AFC online, you've said?

8 MR. SIMPSON: Yes.

9 HEARING OFFICER FAY: Okay. That
10 objection is overruled, and we will receive the
11 moved exhibits into the record at this time.

12 It's overruled because, in part, you
13 waited long, to literally the very last day
14 allowed by the regulations to choose to intervene
15 in this case. Prior to that time you could have
16 had more time to study these documents. And
17 you've acknowledged to me that you did have access
18 to the AFC online.

19 And so the fact that one had not reached
20 you in hard copy by mail did not deprive you of
21 the right to review the exhibits. So, that --

22 MR. SIMPSON: Thank you. If I may
23 respond. I intervened as soon as I discovered the
24 final staff assessment did not include response to
25 my comments.

1 HEARING OFFICER FAY: And we note that.

2 Your objection is overruled.

3 MR. SIMPSON: Thank you.

4 HEARING OFFICER FAY: I'd like to go off
5 the record now for a moment.

6 (Off the record.)

7 HEARING OFFICER FAY: We're back on the
8 record. I just learned that lunch is here, so
9 we'll make this approximately half-hour break. We
10 ask people to get something to eat, refresh
11 yourselves.

12 And we'll try to get started again at
13 12:30. That's the advantage of having food right
14 here. Off the record.

15 (Whereupon, at 12:00 noon, the hearing
16 was adjourned, to reconvene at 12:30
17 p.m., this same day.)

18 --o0o--

19

20

21

22

23

24

25

1 AFTERNOON SESSION

2 12:37 p.m.

3 HEARING OFFICER FAY: Okay, we're back
4 on the record. We had a lunch break. And the
5 applicant has concluded with its direct
6 examination on greenhouse gas emissions.

7 And I'll ask the staff, do you have any
8 cross-examination of the applicant's panel? Ms.
9 DeCarlo?

10 MS. DeCARLO: Oh, I'm sorry. No.

11 HEARING OFFICER FAY: No, all right.
12 And I have an indication that CRPE and Mr. Simpson
13 have some cross-examination. We'll start with
14 CRPE, Ms. Brostrom.

15 MS. BROSTROM: I believe most of my
16 questions are going to be directed to the CEC
17 Staff.

18 HEARING OFFICER FAY: Okay, that's fine.
19 Mr. Simpson, do you have questions of the
20 applicant's panel?

21 MR. SIMPSON: Yes, sir.

22 HEARING OFFICER FAY: Okay.

23 MR. SIMPSON: Thank you.

24 //

25 //

1 CROSS-EXAMINATION

2 BY MR. SIMPSON:

3 Q So you discussed some of the benefits of
4 not having a PPA when you start this process.
5 What are the disadvantages of not having a PPA,
6 power purchase agreement?

7 MR. REXROAD: In our view not having a
8 PPA is neither an advantage nor a disadvantage.
9 It's simply an analysis of the economic state of
10 the power sector at the time that the project is
11 moving through.

12 Not having a PPA before the licensing
13 process starts, the advantage of refining costs
14 and knowing what those costs are, having one prior
15 to that is simply, you know, you put yourself in a
16 situation where you're required to force the
17 licensing process into the revenue and the
18 economics of the PPA you've got.

19 So, you know, not having a PPA just
20 doesn't -- means that you just don't have the
21 certainty of someone that is going to take the
22 energy from the facility when you start the
23 licensing process.

24 Although, you know, that's simply an --
25 not having a PPA before you start is simply an

1 economic risk analysis for the developer.

2 MR. SIMPSON: My understanding is that
3 the facility can serve anywhere in the state?

4 MR. REXROAD: It can serve both the
5 northern part of the state and the southern part
6 of the state, Southern California Edison's service
7 territories and PG&E's service territories. And,
8 in fact, anywhere in the California ISO this
9 project could be dispatched to serve.

10 MR. SIMPSON: And would there be loss
11 associated with the distance, line loss?

12 MR. REXROAD: There are losses
13 calculated as part of moving energy throughout the
14 state. And all plants that move energy through
15 the state are assessed losses based on their
16 location.

17 MR. SIMPSON: So would the loss be
18 different if you moved to Bakersfield or moved to
19 San Diego?

20 MR. REXROAD: Simply depends on where
21 you're trying to move the energy to.

22 MR. SIMPSON: I'm saying if you moved
23 from this facility to Bakersfield, compared to
24 moving from this facility to San Diego, would the
25 line loss be different?

1 MR. REXROAD: All I'm saying is it
2 depends on where you're trying to sell your energy
3 to, as to what the actual line losses would be
4 associated with the facility.

5 I mean line losses are associated with
6 moving the energy from point A to point B. It's
7 simply an analysis of the relative location of the
8 facility to the loads that you're trying to serve
9 with that facility. Not necessarily, you know,
10 where you locate the facility within the
11 transmission system.

12 So if I put the plant in Bakersfield and
13 try to sell to L.A., that'll have sort of one
14 practical line loss application. If I put it in,
15 you know, here and tried to sell to L.A., that may
16 have a different one. But if I'm trying to sell
17 to a utility in the San Francisco Bay Area, that
18 will have a different real line loss versus if I
19 put the plant in Bakersfield.

20 Setting it in this location puts me in a
21 position where I can serve both ends of the state
22 relatively efficiently with regards to line loss.
23 But also drives the voltage selection.

24 MR. SIMPSON: So the line loss to San
25 Diego, do you have that expressed in a percentage?

1 Or how would you --

2 MR. REXROAD: I don't know what those --

3 MR. SIMPSON: -- how would you quantify
4 that?

5 MR. REXROAD: -- numbers are at this
6 time. I haven't looked at the tariff recently to
7 see what's assessed.

8 MR. SIMPSON: I see. But would it be
9 the same line loss from here to Bakersfield, or
10 from here to San Diego?

11 MR. REXROAD: I don't know. I can't
12 speak to that. I suspect -- I can't speak to
13 that.

14 MR. SIMPSON: Is line loss a factor of
15 distance?

16 MR. REXROAD: Yes.

17 MR. SIMPSON: So would a greater
18 distance be a greater line loss?

19 MR. REXROAD: Not necessarily. It also
20 has -- line loss is also a factor of the voltage
21 selection for which you connect to the system, and
22 the design of the transmission lines for which
23 you're trying to move the energy across.

24 MR. SIMPSON: I see. There was
25 discussion of the opportunity for an adjacent

1 solar facility. How would that benefit?

2 MR. REXROAD: That's not being evaluated
3 here. All we said with regards to that discussion
4 was that in the future, should a project wish to
5 site a solar-thermal project in the area, this
6 facility would be capable of augmenting its steam
7 generation with that steam generation to make
8 electricity. Rather than installing in that solar
9 facility the additional balance of plant
10 equipment, overall reducing the cost of that solar
11 facility.

12 MR. SIMPSON: Is there a possibility of
13 using a solar facility to operate to help a fast
14 start or preheat to benefit your system?

15 MR. REXROAD: This facility is not
16 designed for that. And I'm not aware of anybody
17 that has installed something like that at this
18 time.

19 MR. SIMPSON: So you're saying there
20 would be a benefit to the solar facility being
21 next to you?

22 MR. REXROAD: I'm saying that if that
23 technology were to be deemed economic and viable,
24 this facility would be capable of accepting that
25 steam. And that could be a potential benefit to

1 the renewable resource standards, and facility
2 renewable development within the state.

3 I'm not necessarily saying that it would
4 be a benefit or hindrance to this plant or a solar
5 facility in this location. There's no requirement
6 for a solar developer to provide steam to this
7 facility, nor do we have sufficient land to
8 develop a solar facility around this plant, based
9 on the 140 acres that we have -- 148 acres that we
10 have.

11 MR. SIMPSON: I see. So could solar
12 benefit this facility?

13 MS. LUCKHARDT: I think that's been
14 asked and answered.

15 HEARING OFFICER FAY: That's asked and
16 answered. Objection sustained. Move on, please.

17 BY MR. SIMPSON:

18 Q I have a question for you, sir. I'm
19 sorry, I don't know all your names.

20 MR. RUBENSTEIN: Gary Rubenstein.

21 MR. SIMPSON: Mr. Rubenstein, you
22 mentioned that demand is not associated with
23 development of these facilities; that the
24 facilities don't create demand.

25 MR. RUBENSTEIN: I didn't say the first

1 part, but, yes, I did say the second part.

2 MR. SIMPSON: Okay. So, is the
3 development of this facility based upon the belief
4 that we'll have increased demand?

5 MR. RUBENSTEIN: Not necessarily. There
6 could be a need for this plant simply to replace
7 existing generating technology, or to firm up an
8 intermittent renewable resource. It's not
9 contingent on there being an increase in demand.

10 MR. SIMPSON: So, the facility is not
11 partially justified based on growth in demand?

12 MR. RUBENSTEIN: I don't think you can
13 separate out the different components that lead to
14 the need for building a new power plant.

15 And consequently I don't think you can
16 say, no, it's not based on increase in demand.
17 All of these factors will play a role in
18 determining whether or not there's a need in the
19 market for a plant such as this.

20 HEARING OFFICER FAY: Excuse me. Off
21 the record.

22 (Off the record.)

23 BY MR. SIMPSON:

24 Q Is price a factor in demand for
25 electricity?

1 MR. RUBENSTEIN: I think you're getting
2 outside the area of my expertise. I could answer
3 as a layperson that, to a certain extent, the
4 price of electricity affects the demand. But some
5 demands are relatively inelastic with respect to
6 price. I don't pretend to be an expert on the
7 economics of the electricity market.

8 MR. SIMPSON: Then you probably are.
9 Would price be a factor in demand for electricity?

10 MR. REXROAD: There's a wide variety of
11 economic decisions that go into the decision to
12 advance the development of a power plant and to
13 ultimately construct and operate that facility.

14 Price is simply one of the, as we've
15 talked about, a wide variety of economic
16 components that go into the decision to advance
17 that development.

18 You know, the reliability requirements
19 of the state are part of that economic analysis.
20 The renewable standards within the state have some
21 impact on that analysis.

22 MR. SIMPSON: So do you expect to be
23 able to sell your electricity for the same price
24 as other electricities? Higher or lower?

25 MS. LUCKHARDT: I don't think that

1 that's a question that's been addressed in any of
2 our testimony in any way, as far as the price
3 ultimately the electricity would be sold for.

4 I think the only discussion has related
5 to the relative dispatch order of facilities
6 related to their heat rate.

7 HEARING OFFICER FAY: Can you tie your
8 question in, Mr. Simpson, to the testimony that
9 was given? That is, the dispatch order, you know,
10 conservation first, renewables, et cetera, et
11 cetera.

12 MR. SIMPSON: Yes. My questions are
13 pertaining to his contention that there's not a
14 correlation between growth and development of
15 these facilities.

16 These facilities are facilitating growth
17 in the state is my contention. His contention
18 seems to be that these facilities are feeding the
19 growth, they're not causing the growth.

20 HEARING OFFICER FAY: And what is your
21 question?

22 MR. SIMPSON: Well. Thank you. To try
23 and understand that relationship better. I'm
24 trying to understand if you can create more
25 facilities like this, and that causes the price of

1 electricity to go down, does that cause the use of
2 electricity to go up.

3 MS. LUCKHARDT: I don't think that's
4 related to the testimony that we've provided. And
5 I think he's actually moving into an area of
6 demand forecasting that is not really in front of
7 the Committee at this point.

8 MR. SIMPSON: I see, and -- I'm sorry.

9 HEARING OFFICER FAY: Did you want to
10 respond?

11 MR. SIMPSON: Yes. So you did --

12 HEARING OFFICER FAY: You're responding
13 to the objection now.

14 MR. SIMPSON: Yeah, the demand
15 forecasting.

16 HEARING OFFICER FAY: Yes. She raised
17 an objection to the expansiveness of your
18 question.

19 MR. SIMPSON: Yes.

20 HEARING OFFICER FAY: If you are going
21 to disagree with that, you have to do that now.

22 MR. SIMPSON: Yes, I believe that this
23 is based on demand forecasting from the 2007 --

24 HEARING OFFICER FAY: Okay, fine. Then
25 that question is excluded. Demand forecasting is

1 not appropriate at this time. You haven't tied
2 that into the greenhouse gas emissions of the
3 project.

4 If you can, then we'd be interested.
5 But that's really an economic and systemwide
6 dispatch question. Do you want to tie it into
7 greenhouse gas emissions from this project?

8 MR. SIMPSON: Sure. Sure. My question
9 is developing natural gas-fired facilities, do
10 developing these facilities have the potential to
11 prevent the development of renewable resources?

12 MR. RUBENSTEIN: I don't see any way
13 that they would prevent the development of
14 renewable resources.

15 MR. SIMPSON: I see. There's a
16 reliability factor to this that whether or not the
17 facility runs, that if you have a PPA you'll get
18 paid for that capacity?

19 MS. LUCKHARDT: Objection. I believe
20 he's testifying.

21 HEARING OFFICER FAY: Restate your
22 objection?

23 MS. LUCKHARDT: I believe that Mr.
24 Simpson is testifying. I'm not really getting a
25 question out of what he's saying right now.

1 HEARING OFFICER FAY: Well, get to the
2 question, Mr. Simpson.

3 MR. SIMPSON: Thank you.

4 BY MR. SIMPSON:

5 Q Is there a capacity surcharge that's
6 paid by PG&E customers or utility customers for
7 facilities whether or not they run, based upon the
8 reliability factor?

9 MR. RUBENSTEIN: I'm sorry. You asked,
10 is there a capacity surcharge paid by PG&E
11 customers?

12 MR. SIMPSON: Yes.

13 MR. RUBENSTEIN: I don't recall seeing a
14 capacity surcharge on my electric bill. So, no, I
15 don't believe so.

16 MR. SIMPSON: Okay.

17 HEARING OFFICER FAY: Before your next
18 question, Mr. Simpson, I think Chairman Douglas
19 understands the path of your questioning and may
20 be able to help.

21 MR. SIMPSON: Help.

22 ASSOCIATE MEMBER DOUGLAS: Well, I may
23 or may not understand the path of your
24 questioning, Mr. Simpson. But, your question is
25 triggering a question that I have that I had meant

1 to address, was planning to address to the
2 witness.

3 And that is that the applicant is
4 asserting that because this power plant would make
5 the overall system more efficient per unit of
6 electricity produced, that that's an environmental
7 benefit, among other potential benefits of this
8 power plant.

9 My question to you is how the potential
10 increase in demand factors into that calculation.
11 You said in your testimony that the power plant,
12 itself, does not cause demand growth.

13 But looking at this from a system
14 perspective, how do increasing the efficiency of
15 greenhouse gas production -- or, I'm sorry, of
16 electricity production per unit and the potential
17 for either growth or decrease in demand relate?

18 MR. RUBENSTEIN: Looking at the electric
19 grid in California within the near to mid term,
20 the next 10 to 20 years, I don't see that the
21 incremental either increases or decreases in
22 demand as a result of both growth and increased
23 energy conservation are going to significantly
24 affect the dispatch order.

25 My conclusion about the displacement of

1 other less efficient resources critically depends
2 on, I think, just one assumption. And that
3 assumption is that there are still gas plants
4 operating in California with a range of
5 efficiencies.

6 And as long as that remains true,
7 whether the demand is higher or lower, then that
8 simply shifts the entire curve up or down of the
9 incremental question about the impact of this
10 particular plant. It still depends on where it is
11 in that dispatch order.

12 And as long as there are less efficient
13 gas resources for this plant to displace, then my
14 conclusion is still the same, that there would be
15 a net benefit.

16 If --

17 ASSOCIATE MEMBER DOUGLAS: How do you
18 see the state's effort to reduce its imports of
19 coal power relating to this question?

20 MR. RUBENSTEIN: If anything -- there
21 are a couple of possibilities. If the state's
22 efforts to reduce imported coal are somehow fully
23 supplanted by renewable resources, then in terms
24 of where this gas plant is in the dispatch order
25 is still the same. It's still more efficient than

1 other legacy gas plants, other older gas plants.

2 If, on the other hand, the state's
3 efforts to reduce reliance on imported coal
4 triggers the demand for more gas-fired efficient
5 baseload power, then there will be more plants
6 like this plant coming before you and coming into
7 the market.

8 In which case, this plant will be in the
9 same top tier. Or if there are some advances in
10 technology, maybe a little bit less efficient than
11 the next ones that come along.

12 In that case, if there are more
13 efficient gas generation technologies that come
14 along in five or ten years, and this plant isn't
15 as efficient, therefore it can't compete, we get
16 to what I had indicated before as the worst case,
17 which is the plant shuts down and generates no
18 greenhouse gas emissions.

19 And Mr. Rexroad has a lot of egg on his
20 face because he's built a plant that isn't
21 running. But in terms of the environmental
22 impact, that worst case is that this plant doesn't
23 run because it can't compete efficiently in the
24 market for a gas-fired plant. Economic
25 competitiveness is virtually identical to

1 greenhouse gas generation efficiency.

2 And as a result the worst case is no
3 generation, no benefits. The best case is some
4 generation and some benefits.

5 Did that make sense?

6 ASSOCIATE MEMBER DOUGLAS: That's
7 helpful. Mr. Simpson, I'm sorry I broke into your
8 train of questions, --

9 MR. SIMPSON: Oh, thank you.

10 ASSOCIATE MEMBER DOUGLAS: -- but I was
11 interested --

12 MR. SIMPSON: I needed a little break.

13 ASSOCIATE MEMBER DOUGLAS: -- in the
14 issue of demand growth and how it relates. And I
15 think that was possibly some of what you were
16 trying to get at.

17 BY MR. SIMPSON:

18 Q And for your plan, doing a solar
19 facility didn't work. Why is that?

20 MS. LUCKHARDT: I'm sorry --

21 MR. SIMPSON: Want me to try again?

22 MS. LUCKHARDT: You asked whether the
23 plan for a solar facility didn't work?

24 MR. SIMPSON: Yeah. Why are you
25 building a natural gas plant instead of a solar

1 plant?

2 MS. LUCKHARDT: I don't think that
3 that's -- first of all, I would object to the
4 statement that your plan for a solar facility
5 didn't work, since there wasn't a plan for that in
6 the instance here. So I'd object to that.

7 MR. SIMPSON: I restated the question.

8 MS. LUCKHARDT: Your restatement of the
9 question isn't before this Committee. It isn't
10 before -- what we're looking at is the project
11 that's before you, not some other project.

12 HEARING OFFICER FAY: Well, I'm going to
13 allow just this question. And then if you want to
14 pursue this line, you'll have to bring it up when
15 we talk about alternatives.

16 MR. SIMPSON: Okay.

17 HEARING OFFICER FAY: But I'll allow
18 that single question.

19 MR. REXROAD: So as a developer you look
20 at all of the various indicators as to what types
21 of technologies are available for a particular
22 location within the guidelines and criteria that
23 you have available to you.

24 In other words, what type of air quality
25 issues are there; what are the economic drivers

1 within the region; what are the fuel sources; what
2 is the cost of the facility.

3 And our decision, based on this location
4 and the accessibility of the various drivers that
5 a developer looks at with regards to economics and
6 environmental impacts, we viewed that for this
7 location at this time a combined cycle, natural
8 gas-fueled power plant was the best option for the
9 site that we had available to us for this project.

10 MR. SIMPSON: I see. Would a solar
11 plant emit less greenhouse gases?

12 MR. REXROAD: I would suggest that a
13 solar --

14 MR. SIMPSON: It's just a yes or no
15 question.

16 MR. REXROAD: I don't know that I've
17 looked at what the actual emission sources from a
18 solar facility are. I mean there are solar
19 facilities in this state that do have the ability
20 to cofire natural gas, and they have greenhouse
21 gas emissions.

22 So a question of whether the greenhouse
23 gas emissions from a solar facility would be less
24 than this one, I could speculate that they would
25 likely be less. But I can't speak to whether they

1 would be less or not.

2 MR. SIMPSON: And would you two have an
3 opinion? Would a solar plant be less greenhouse
4 gas emissions?

5 MR. RUBENSTEIN: Yes, I do have an
6 opinion. And there is no simple yes or no answer
7 to that question.

8 The answer is it depends on two factors.
9 One is what the design of the solar plant is,
10 because there's a wide range of solar technologies
11 ranging from photovoltaic to solar-thermal to
12 solar-thermal with gas-fired backup, to solar-
13 thermal with other fuel backup.

14 And then the second part is related to
15 where you draw the circle when you say are there
16 less greenhouse gas emissions. Are you only
17 looking at the greenhouse gas emissions associated
18 with the production of electricity at the site?
19 Or are you also taking a look at a lifecycle
20 analysis.

21 So, the answer is it depends. For many
22 cases I would expect that most types of solar
23 generating technologies would result in fewer
24 greenhouse gas emissions, but not always. And it
25 depends on the technology.

1 MR. REXROAD: And I would add that, you
2 know, there are other drivers which revolve around
3 solar facilities that may make the overall
4 environmental impact of that facility greater than
5 or less than the natural gas facility. It's
6 plant-specific and location-specific.

7 MR. SIMPSON: But I'm trying to stay
8 focused on greenhouse gas emissions.

9 MR. REXROAD: I understand.

10 MR. LAUCKHART: I'd just like to add
11 there that I don't view, in any way, this plant
12 competing with a solar plant.

13 People who develop solar plants are not
14 going to stop developing them because this plant
15 might be built. You know, solar plants have a lot
16 of difficulty, particularly in the financial area,
17 because of prices, et cetera, of them.

18 But at the end of the day let's assume
19 that those solar developers can develop a lot of
20 solar facilities, because there are a lot of
21 people who are trying to develop solar plants.

22 If they all get developed and we can
23 entirely meet the entire load in the western
24 United States with solar, which I can't fathom
25 will happen, but it could, this plant just won't

1 run. And then this plant won't be contributing
2 anything to greenhouse gases.

3 MR. SIMPSON: So you're saying you don't
4 think there's a supply-and-demand coefficient.
5 That we have enough supply here, we won't develop
6 other sources.

7 MR. LAUCKHART: No, because the
8 requirements for renewables are driven by an
9 energy requirement. And we're having a hard time
10 meeting our demands in the western United States
11 for renewables, as it is.

12 So, you know, this is one of those
13 plants that would be there for the balance of the
14 renewable needs, and could also be used if we
15 don't make it on the renewable goals.

16 But I think the short story here is this
17 plant is not going to push out a solar plant.

18 MR. SIMPSON: Are any of you familiar
19 with the California energy demand staff forecast
20 from June of this year?

21 MR. LAUCKHART: Yes.

22 MR. SIMPSON: Would the information in
23 that report bring you to a different conclusion
24 than the 2007 IEPR?

25 MS. LUCKHARDT: I'm sorry, but I don't

1 have that report in front of me. I'd be concerned
2 about having too much discussion of that
3 particular demand forecast in this case. It
4 hasn't been offered as an exhibit prior to now.

5 We may have a witness who has general
6 familiarity with it. We don't have it to refer
7 to. I can tell you I haven't read it.

8 HEARING OFFICER FAY: Okay. I'm going
9 to sustain that. Mr. Simpson, the problem is that
10 you've created a surprise for the witnesses. And
11 we just don't tolerate that in our proceeding.
12 That's why we have prefiled testimony.

13 Now, if you had offered that, or asked
14 that we take official notice of it in advance, so
15 people could have it before them, that would be
16 helpful.

17 However, if you have some specific
18 question that you want to ask from that, I'll
19 allow you to ask that, if you want to ask at X
20 level, that sort of thing, as a hypothetical.

21 MR. SIMPSON: Yeah. So it's not
22 something -- can we take notice of it?

23 MS. LUCKHARDT: I would object to taking
24 notice of it at this time --

25 HEARING OFFICER FAY: Yeah, this is --

1 it's pretty late in the day.

2 MS. LUCKHARDT: -- simply because I
3 don't have it.

4 HEARING OFFICER FAY: Yeah. And while
5 you're deciding that, I'd note that you're about
6 halfway through your cross time of both parties.
7 So just kind of keep that in mind as you balance
8 between the staff and the applicant on greenhouse
9 gases.

10 MR. SIMPSON: Okay, thank you. I'd
11 better leave that sit for a minute.

12 BY MR. SIMPSON:

13 Q Is there a number of startups allowed in
14 your permitting scheme?

15 MR. REXROAD: This project does have --
16 the project was analyzed based on a number of
17 startups. I don't have the permit in front of me
18 at the moment. I'd have to go back and look at
19 what the exact number is.

20 We can -- I think Mr. Rubenstein may be
21 able to answer that fairly quickly. But there is
22 a number of starts that this project is predicated
23 on.

24 MR. SIMPSON: Is it basically daily?

25 MR. REXROAD: No.

1 MR. SIMPSON: While we wait for Mr.

2 Rubenstein maybe I'll --

3 (Pause.)

4 MR. SIMPSON: Can you tell me how

5 much --

6 MR. RUBENSTEIN: I'm sorry, did you want

7 an answer to your question?

8 MR. SIMPSON: Please.

9 MR. RUBENSTEIN: I don't believe that
10 there is a limit on the number of startups allowed
11 in the permit. As Mr. Rexroad indicated, the
12 calculations of maximum allowable emissions during
13 any calendar quarter and during any calendar year
14 were predicated on assumptions about how frequent
15 startups would occur.

16 But the frequency of startups are
17 essentially going to be limited by the quarterly
18 and annual emission limits.

19 MR. SIMPSON: I see. So, could it be
20 daily?

21 MR. RUBENSTEIN: It is, I think,
22 theoretically possible, but it could be daily as
23 long as it didn't run very much. So that you
24 maintained your compliance with your daily and
25 annual emission limits.

1 HEARING OFFICER FAY: Let's go off the
2 record.

3 (Off the record.)

4 HEARING OFFICER FAY: Mr. Rubenstein was
5 addressing the allowable startups under the
6 permit. Anything further, Mr. Rubenstein?

7 MR. RUBENSTEIN: I don't believe so. I
8 think I answered the question.

9 HEARING OFFICER FAY: Okay.

10 MR. SIMPSON: So, did I hear that it
11 could be daily, but there may be a -- you may push
12 a limit with that, or -- I didn't quite catch it.

13 MR. RUBENSTEIN: I --

14 HEARING OFFICER FAY: He said that the
15 permit limits, in terms of emissions, not in terms
16 of number of startups, I believe.

17 MR. SIMPSON: I see.

18 BY MR. SIMPSON:

19 Q Do a lot of facilities of this size
20 start and stop on a daily basis?

21 MR. RUBENSTEIN: I'm not aware that a
22 lot of them do. There may be some that do for
23 some periods of time during some seasons of the
24 year.

25 MR. SIMPSON: I see. If you had

1 employed the fast-start technology, would your
2 emissions be less if you started on a daily basis?

3 MR. RUBENSTEIN: The maximum hourly
4 emissions would be, in my opinion, essentially
5 unchanged. The maximum daily emissions would be
6 perhaps lower if the result was an increase in
7 your operations during the course of the day.

8 And the maximum quarterly or annual
9 emissions might be higher or lower, depending on
10 what the remainder of the operating profile looked
11 like.

12 MR. SIMPSON: Startup emissions I'm
13 referring to.

14 MR. RUBENSTEIN: So, is your question if
15 I ignore all the rest of the emissions, and only
16 look at startup emissions, would the emissions be
17 lower with one of the rapid-start technologies?

18 I'm just trying to understand your
19 question, sir.

20 MR. SIMPSON: Thank you. Yes, would --
21 no, my question is would the startup emissions be
22 lower with fast-start technology.

23 MS. LUCKHARDT: And are we talking about
24 criteria emissions or greenhouse gas emissions?

25 HEARING OFFICER FAY: We're supposed to

1 be addressing and limiting ourselves to greenhouse
2 gas emissions.

3 MR. SIMPSON: So I'll limit my question
4 to greenhouse gas emissions. Thank you.

5 MR. RUBENSTEIN: I don't know the answer
6 to that question. I'd have to take a look.

7 MR. SIMPSON: Are any of the criteria
8 emissions also greenhouse gas emissions?

9 MR. RUBENSTEIN: None of the criteria
10 pollutants are greenhouse gas emissions, as
11 defined under AB-32.

12 MR. SIMPSON: I see. Thank you.

13 HEARING OFFICER FAY: Okay. And is
14 there any redirect, Ms. Luckhardt?

15 MS. LUCKHARDT: That's what I'm looking
16 at right now. I think there was one question that
17 was asked by Chairman Douglas about importing coal
18 power and some issues related to demand.

19 REDIRECT EXAMINATION

20 BY MS. LUCKHARDT:

21 Q And I'm wondering, Mr. Lauckhart, if you
22 can talk about what your study showed in the out
23 years for this facility regarding importing coal.

24 MR. LAUCKHART: Yes. The question kind
25 of is what mechanism are we going to use to limit

1 importing coal from existing coal plants.

2 And there's a lot of talk about cap-and-
3 trade. Of course, whether it's a California or a
4 western or a national cap-and-trade, you know,
5 people are thinking that cap-and-trade is going to
6 probably be the way we do that.

7 So when you do cap-and-trade, of course,
8 people get allowances, there's not as many as they
9 would like to have so you buy them and sell them;
10 and it makes certain plants more expensive to run.
11 The higher GHG-emitting plants are more expensive
12 to run by doing that.

13 And that's why, in our forecast, we made
14 a forecast of what the cap-and-trade prices would
15 be. And they start out relatively low, \$7 a ton
16 in our forecast in 2012. And they grow relatively
17 rapidly to \$35 a ton in 2017, which is the last
18 year of the study we've done here.

19 But in that last year this plant is
20 beginning to displace some of that existing coal
21 because of the cost of those allowances that we've
22 assumed.

23 So, if the approach to eliminating the
24 use of coal in California is through a cap-and-
25 trade program, that's kind of how we've addressed

1 this analysis. And it shows that this more
2 efficient plant will begin to displace coal when
3 those greenhouse gas emissions allowances prices
4 grow.

5 ASSOCIATE MEMBER DOUGLAS: Did your
6 analysis look at or factor in the impact of
7 current state law prohibiting utilities from
8 entering into new long-term contracts for coal?

9 MR. LAUCKHART: So the law prohibiting
10 signing up new long-term contracts for coal, it
11 was primarily there to stop some development of
12 some brand new coal plants that California
13 utilities were going to participate in.

14 Our assumption here is that none of
15 those are going to be getting built in any event.
16 And so all we're dealing with is what about the
17 existing coal plants, and will we have a way to
18 reduce their generation and reduce greenhouse gas
19 emissions.

20 HEARING OFFICER FAY: Is that all?

21 MS. LUCKHARDT: I have nothing further.

22 HEARING OFFICER FAY: Okay. Any recross
23 on that narrow question? Staff?

24 MS. DeCARLO: No.

25 HEARING OFFICER FAY: Mr. Simpson?

1 MR. SIMPSON: Yes, thank you.

2 RECROSS-EXAMINATION

3 BY MR. SIMPSON:

4 Q Is there any mechanism that guarantees
5 that this plant will displace coal power from
6 somewhere else? Or is it just this loading order
7 that you rely on?

8 MR. LAUCKHART: Well, the mechanism is
9 in our world of power generation economic
10 dispatch. And everybody who's scheduling power
11 for tomorrow, to meet the loads for tomorrow,
12 scheduling their power, they're trying to do it at
13 the lowest, cost effective manner. They're not
14 going to build a new coal plant for tomorrow, of
15 course, so you're just going to be scheduling some
16 existing coal plants.

17 And in California there is a form of a
18 centralized dispatch market through the Cal-ISO.
19 The rest of the west we don't have that, but we
20 have a very efficient scheduling process in the
21 west that I've been involved in since the early
22 '70s, where people are trying to figure out where
23 is the cheapest power. The cheapest power, what's
24 the lowest cost power.

25 And having sat through cross-examination

1 on whether we were doing that right, as this
2 utility I was doing this for, you know, it's very
3 important in your business to do that right, to it
4 cost effective.

5 When you add a greenhouse gas allowance
6 cost, that's going to impact which plants are
7 cheaper to run. And, you know, the world was
8 built around we're going to do economic dispatch.
9 And that's why cap-and-trade works like that.

10 MR. SIMPSON: So, if I heard you
11 correct, coal's cheaper. But if they put enough
12 of a cap-and-trade or enough of a tax on carbon,
13 then your product will be cheaper?

14 MR. LAUCKHART: Yeah. The coal in the
15 west is cheaper because a lot of it is mine-mouth
16 coal. You just dig it out of the ground, put it
17 in the plant. In some places you have to rail it
18 across the country. Then it's not cheap. But in
19 the west most of it is mine-mouth coal.

20 And you can generation, you know, for
21 maybe \$20 a megawatt hour for a coal plant. While
22 this plant here, at \$5 gas, is generating for 7000
23 heat rate, \$35. So coal is going to be cheaper.

24 Now, this plant only puts out half the
25 amount of greenhouse gas emission as a coal plant

1 does. So you can figure out what price does it
2 take for the greenhouse gas allowance before
3 suddenly the gas is cheaper than the coal.

4 MR. SIMPSON: So do you have some
5 indication of what that figure is?

6 MR. LAUCKHART: Right. And as we show
7 in our analysis here, at \$35 some of -- this plant
8 begins to be cheaper than some coal plants.

9 MR. SIMPSON: With what sort of a carbon
10 adder?

11 MR. LAUCKHART: \$35 a ton. Which is
12 what we used in the study in the year 2017.

13 MR. SIMPSON: Wait, \$35 a ton is the
14 carbon dioxide price, or that's the cost to run --

15 MR. LAUCKHART: That's that -- pardon
16 me? That's the --

17 MR. SIMPSON: That's the cost of the --

18 MR. LAUCKHART: -- CO2 greenhouse gas
19 allowance price.

20 HEARING OFFICER FAY: Okay.

21 MR. SIMPSON: Thank you.

22 HEARING OFFICER FAY: We'd like to move
23 to -- any further redirect, Ms. Luckhardt?

24 MS. LUCKHARDT: No.

25 HEARING OFFICER FAY: Okay. So, now we

1 want to move to the staff's direct testimony on
2 greenhouse gases. Ms. DeCarlo.

3 MS. DeCARLO: Thank you. I have four
4 witnesses that need to be sworn in.

5 HEARING OFFICER FAY: Okay. Will the
6 witnesses please stand. The court reporter will
7 swear the witnesses.

8 Whereupon,

9 BREWSTER BIRDSALL, DAVID VIDAVER

10 STEVEN McCLARY and MATTHEW LAYTON

11 were called as witnesses herein, and after first
12 having been duly sworn, were examined and
13 testified as follows:

14 THE REPORTER: And now could you
15 individually state and spell your full names for
16 the record?

17 MR. BIRDSALL: Hello. My name is
18 Brewster Birdsall. I'll spell it B-r-e-w-s-t-e-r,
19 last name Birdsall, B-i-r-d-s-a-l-l. And I am an
20 employee of Aspen Environmental Group. I'm a
21 contractor with the California Energy Commission.
22 I'm the author of the air quality section of the
23 staff assessment, and a co-author on the
24 greenhouse gas analysis.

25 MR. VIDAVER: My name is David Vidaver.

1 David, D-a-v-i-d. Vidaver, V-i-d-a-v-e-r. I'm a
2 member of the Energy Commission Staff. I
3 attributed to air quality appendix air-1.

4 MR. McCLARY: My name is Steven McClary.
5 S-t-e-v-e-n M-c-C-l-a-r-y. I am a principal of
6 MRW and Associates, under contract to the Energy
7 Commission. And lead author on the MRW greenhouse
8 gas framework report that's been referred to.

9 MR. LAYTON: My name's Matthew Layton,
10 L-a-y-t-o-n. Co-author with Brewster Birdsall on
11 the greenhouse gas section of the air testimony.

12 MS. DeCARLO: And staff would like to
13 sponsor into the record the MRW report, officially
14 titled, Framework for Evaluating Greenhouse Gas
15 Implications of Natural Gas-Fired Power Plants in
16 California." And could we establish that as
17 exhibit 203?

18 HEARING OFFICER FAY: All right. The
19 MRW report will be exhibit 203.

20 MS. DeCARLO: Thank you.

21 DIRECT EXAMINATION

22 BY MS. DeCARLO:

23 Q Mr. McClary, did you help prepare the
24 report titled, Framework for Evaluating Greenhouse
25 Gas Implications of Natural Gas-Fired Power Plants

1 in California, dated May 2009, exhibit 203?

2 MR. McCLARY: Yes, I did.

3 MS. DeCARLO: Was a statement of your
4 qualifications included in Energy Commission
5 Staff's prehearing conference statement filed on
6 June 22, 2009?

7 MR. McCLARY: Yes, it was.

8 MS. DeCARLO: And do you have any
9 corrections to your report?

10 MR. McCLARY: Yes, I have one errata to
11 note, on page 46 of the report, exhibit 203. The
12 first full sentence, second line down where it
13 states "Over-generation conditions occur when
14 these actions have been taken, but load continues
15 to exceed generation."

16 It should actually read, "but generation
17 continues to exceed load."

18 MS. DeCARLO: Thank you. And so the
19 opinions contained in the testimony you are
20 sponsoring represent your best professional
21 judgment?

22 MR. McCLARY: Yes, they do.

23 MS. DeCARLO: Mr. Birdsall, did you help
24 prepare the testimony titled, air quality appendix
25 air-1, greenhouse gas emissions in the final staff

1 assessment, exhibit 200?

2 MR. BIRDSALL: Yes, I did.

3 MS. DeCARLO: Do you have any
4 clarifications of your testimony?

5 MR. BIRDSALL: One minor clarification
6 on the header to the table named table 6 under the
7 greenhouse gas appendix. This is on page 4.1-85
8 of the final staff assessment.

9 And greenhouse gas table 6 has a header
10 right now of units utilizing once-through cooling.
11 The title of the table can be changed to identify
12 aging and units utilizing once-through cooling.
13 Because the table covers aging units that do not
14 utilize once-through cooling, as well as once-
15 through cooling units.

16 MS. DeCARLO: Was a statement of your
17 qualifications attached to your testimony?

18 MR. BIRDSALL: Yes, it was.

19 MS. DeCARLO: And do the opinions
20 contained in the testimony you are sponsoring
21 represent your best professional judgment?

22 MR. BIRDSALL: Yes.

23 MS. DeCARLO: Mr. Layton, did you help
24 prepare the testimony titled air quality appendix
25 air-1, greenhouse gas emissions in the final staff

1 assessment, exhibit 200?

2 MR. LAYTON: I did.

3 MS. DeCARLO: Was a statement of your
4 qualifications included in Energy Commission
5 Staff's prehearing conference statement filed on
6 June 22, 2009?

7 MR. LAYTON: It was.

8 MS. DeCARLO: And do the opinions
9 contained in the testimony you are sponsoring
10 represent your best professional judgment?

11 MR. LAYTON: Yes.

12 MS. DeCARLO: And lastly, Mr. Vidaver,
13 did you help prepare the testimony titled air
14 quality appendix air-1, greenhouse gas emissions,
15 in the final staff assessment, exhibit 200?

16 MR. VIDAVER: Yes, I did.

17 MS. DeCARLO: Was a statement of your
18 qualifications included in Energy Commission
19 Staff's prehearing conference statement filed on
20 June 22, 2009?

21 MR. VIDAVER: Yes, it was.

22 MS. DeCARLO: And do the opinions
23 contained in the testimony you are sponsoring
24 represent your best professional judgment?

25 MR. VIDAVER: Yes, they do.

1 MS. DeCARLO: Mr. McClary, can you
2 please briefly discuss the conclusions you reached
3 in your report regarding the analysis of
4 greenhouse gas emissions for power plants.

5 MR. McCLARY: Yes. What we were asked
6 to do in this report was to begin the process of
7 developing a framework for how the Commission can
8 consider the greenhouse gas implications of
9 natural gas-fired plants in the context of siting
10 cases and California energy policy more generally.

11 As we heard already today, the
12 California electricity system is complex, a
13 variety of resources with different kinds of
14 characteristics, both environmental and
15 operational. It's also complicated in the number
16 of agencies and entities that set policy.

17 However, within that, it's clear that
18 California is headed in a direction of reducing
19 greenhouse gas emissions through a combination of
20 aggressive energy efficiency measures that affect
21 demand for electricity in the state. And
22 renewable resource development with targets,
23 specifically what's been referred to as the 33
24 percent target, which is 33 percent renewable
25 resources by the year 2020.

1 Within that policy context, and given
2 the existing set of resources in California, we
3 were looking at how you would consider the need
4 for natural gas-fired plants in the state, as
5 they're presented to the Energy Commission for
6 consideration.

7 We've heard quite a bit about the
8 different kinds of uses and roles that natural
9 gas-fired plants might play. What we put forward
10 in the report was essentially a way of looking at
11 five basic roles the natural gas-fired plants
12 could play within this context of California
13 energy policy generally.

14 And those five roles that we identified
15 were the facilitating the integration of what are
16 considered to be intermittent kinds of renewable
17 resources, the most commonly cited examples being
18 wind and solar resources.

19 Another role would be the meeting of
20 local capacity requirements in specific areas
21 where capacity is required because of transmission
22 limitations or specific requirements within the
23 area, geographic area typically.

24 A third role is to meet the need for
25 particular kinds of grid operational services,

1 ancillary services. This is a role that the
2 California ISO, the Independent System Operator,
3 which operates the transmission grid for the
4 investor-owned utilities in California, specifies
5 the kinds of services they need. These are things
6 like ramping, capability, spinning reserve,
7 nonspinning reserve, black start services.

8 A fourth role for natural gas-fired
9 plants will be in meeting extreme load or
10 emergency kinds of conditions. This is typically
11 what are referred to as peakers. And would be
12 meeting the requirement for very high demand on
13 say peak hot summer days. And also to meet
14 various emergency conditions, for example loss of
15 a transmission line into an area or another plant
16 that was already operating going down. These are
17 plants that can kick in to sustain the electricity
18 supply.

19 And then a final role that we had
20 identified was what you might call a general
21 energy role. This is the ability to supply energy
22 at an efficiency compared to other generators on
23 the grid that allows this plant, any plant,
24 natural gas-fired plant, to displace other
25 generation, and generally increase the efficiency

1 of electricity generation on the grid.

2 And this is, as has been talked about
3 today, the kind of role that has been identified
4 for this plant, along with some others. But it's
5 a primary role, I think, today.

6 The increased efficiency of the system
7 resulting in a net reduction in greenhouse gas
8 emissions from the electricity system, as a whole.

9 MS. DeCARLO: Okay, thank you. Mr.
10 Layton, can you please explain how you used the
11 report produced by Mr. McClary in your analysis
12 about greenhouse gas emissions impacts.

13 MR. LAYTON: The Energy Commission has
14 been preparing greenhouse gas sections on power
15 plants for quite some time now. In trying to look
16 at the CEQA impacts of power plants and the
17 greenhouse gases, the Commission ordered
18 initiating informational proceedings on greenhouse
19 gases.

20 Out of that report came a requirement or
21 suggestion that there should be an MRW report, or
22 report prepared discussing the framework.

23 The framework that Mr. McClary talked
24 about that his firm prepared, laid out the roles.
25 It was a policy overlay of all these various

1 roles, the renewables, the building standards,
2 efficiency standards, efficiency improvements,
3 demand reduction.

4 On top of that the efforts to reduce or
5 remove the once-through cooled units. Reduce,
6 remove coal from our loading order. And also the
7 aging infrastructure that we have in some units
8 within the state.

9 So the MRW report also laid out the role
10 of dispatchable gas plants within the state, and
11 how those plants would be used to achieve the
12 policy goals, all those policy goals that are
13 overlaid on top of our electricity demand.

14 The framework report -- I can't read my
15 own writing, as always -- anyway, the MRW report,
16 in discussing those roles, we looked at Avenal and
17 realized that the Avenal plant did fit some of
18 those roles and would provide a greenhouse gas
19 reduction if it operated.

20 How much it operates is very uncertain
21 given that the power plant doesn't have a
22 contract, and we're not really sure how it's going
23 to operate. So we didn't reach a conclusion about
24 whether, what the quantity of reduction would be,
25 but we do realize that given the other projects

1 that might be displaced by this project, for any
2 hour that Avenal would run it would reduce
3 greenhouse gases.

4 MS. DeCARLO: Some comments have been
5 made questioning the baseline that staff chose to
6 use in this analysis. Can you please explain what
7 baseline you used to determine Avenal's GHG
8 emissions would be less than significant?

9 MR. LAYTON: We used the systemwide
10 baseline. The project today, the system today,
11 and what the system would be like tomorrow if
12 Avenal is built tomorrow.

13 The electricity demand would be the
14 same. And therefore, if the plant operated it
15 would displace some unit that was most likely less
16 efficient.

17 Again, this is on an average basis. In
18 any one hour there may be subtle variations on the
19 economic dispatch. But, on average, when this
20 plant operates it will displace something that's
21 less efficient.

22 MS. DeCARLO: And that displacement will
23 occur at the same time the plant is operated?
24 It's not --

25 MR. LAYTON: Correct.

1 MS. DeCARLO: -- some future
2 displacement?

3 MR. LAYTON: Yes.

4 MS. DeCARLO: Okay. Mr. Birdsall, can
5 you please discuss your analysis of Avenal's
6 construction-related greenhouse gas emissions
7 impacts?

8 MR. BIRDSALL: Sure. The greenhouse gas
9 analysis takes a look at the construction of the
10 facility, as well as the operation of the
11 facility.

12 During construction there are direct
13 emissions caused at the project site by operating
14 heavy equipment and operating all of the motor
15 vehicles that are used to deliver materials to the
16 site.

17 Those greenhouse gas emissions are part
18 of the construction phase. They occur for a
19 limited time. And they would occur even if the
20 plant never runs after it's built.

21 Those emissions we view as in the
22 context of being limited by their duration,
23 limited to the 27-month construction schedule.

24 And while we did not conduct discovery
25 to specifically quantify every ton of construction

1 emissions, we have a range of expected emissions
2 for that construction phase.

3 The conclusion for the GHG impacts
4 during construction is one of less than
5 significant based on the project sponsor being
6 required to implement air quality mitigation
7 measures that address criteria pollutants that
8 help to insure that the construction equipment
9 used would be most efficient. And by being the
10 most efficient construction used, then the GHG
11 impact during construction would be minimized.

12 And by minimizing the construction
13 emissions we feel that a less than significant
14 conclusion can be made, because, as I said, these
15 construction phase emissions are short term, and
16 minimized with the best available technologies for
17 efficient equipment.

18 MS. DeCARLO: Some comments have been
19 made questioning why no threshold of significance
20 was identified. Can you please discuss why staff
21 chose not to propose one in this case?

22 MR. BIRDSALL: There are a lot of
23 questions out there on how to address greenhouse
24 gas emissions.

25 HEARING OFFICER FAY: Mr. Birdsall, can

1 you twist the mic while you're speaking into it.

2 Yes, thank you.

3 MR. BIRDSALL: We did not select a
4 quantitative threshold for construction emissions
5 for a variety of reasons. One is that there isn't
6 yet formal guidance from the California Air
7 Resources Board or the Governor's Office of
8 Planning and Research on what would be a suitable
9 threshold for construction-phase emissions.

10 Additionally, we have to view that
11 construction-phase emissions are going to be a
12 consequence of any construction that is necessary
13 to move forward in the state of California in
14 order to implement AB-32 goals, in order to build
15 California in a way that is consistent with a high
16 renewables future or a low GHG future.

17 For example, I'm thinking of projects
18 that are before the Commission right now in the
19 Carissa Plain. A solar project requires some
20 amount of construction activity. And to say that
21 construction activity more than blank tons per
22 year would cause a significant greenhouse gas
23 impact, I think, would be very shortsighted.
24 Because some building will be necessary in order
25 to address longer term operational GHG reductions.

1 And so we haven't set a quantified
2 threshold of significance for construction. And
3 this is consistent with how we've been viewing the
4 previous cases before the Energy Commission. I
5 think that this will continue to be a useful
6 strategy going forward, as we continue to evaluate
7 solar-thermal plants, as well.

8 MS. DeCARLO: Thank you. Mr. Vidaver,
9 if Avenal is built, what types of resources would
10 it be likely to displace?

11 MR. VIDAVER: As has been discussed
12 earlier, the dispatch queue is such that
13 renewables with no fuel cost, at virtually zero
14 variable costs, would continue to be dispatched.
15 Nuclear would be continued -- would continue to be
16 dispatched. We would continue to observe the same
17 amount of hydroelectric energy that we would
18 otherwise.

19 In the near term we would continue to
20 see coal dispatched across the WECC. The only
21 thing that would be displaced would be higher-
22 cost, less-efficient, and therefore greater GHG-
23 emitting gas-fired resources.

24 MS. DeCARLO: Is it likely it would ever
25 displace electricity from renewable sources such

1 as solar or wind?

2 MR. VIDAVER: No. As has been pointed
3 out, these have -- well, there are a couple of
4 reasons. One is that the utilities in the state
5 have a mandate to purchase by 2020 up to 33
6 percent or more, if economic, of their energy,
7 from renewable sources. So they would still be
8 obligated to do this.

9 And even if it were pure economics, once
10 you've built the wind plant and the solar facility
11 the energy is nearly free and much cheaper than
12 that of a gas plant. So those resources would
13 continue to be dispatched.

14 MS. DeCARLO: So comments have been
15 raised expressing concern that if Avenal were
16 permitted there might not be enough room on the
17 electrical grid for alternative energy sources
18 such as solar or wind facilities.

19 In your opinion is this a realistic
20 concern?

21 MR. VIDAVER: No. As Mr. Rexroad
22 commented earlier, the ISO, California ISO's
23 interconnection process assures equal access to
24 the interconnection to the grid for all projects.
25 So the interconnection of Avenal would not

1 preclude the subsequent interconnection of any
2 other project, renewable or otherwise.

3 MS. DeCARLO: It has been argued that
4 since you can't require the plants to shut down,
5 you really have no basis for anticipating any GHG
6 reductions as a result of Avenal.

7 Can you explain why it is that you
8 believe that it is reasonable to conclude that if
9 Avenal does run, it would displace other less
10 efficient, and therefore more GHG-emitting, power
11 plants?

12 MR. VIDAVER: The displacement doesn't
13 assume the retirement of existing inefficient
14 plants. Those plants could continue to operate.

15 All that Avenal would do would be to
16 insure that the amount of energy that these plants
17 produced was less. The combustion of fuel by
18 Avenal in the form of displacement would be less
19 than that for the displaced plants.

20 That wasn't even English, I'm sorry. We
21 don't assume the plants would necessarily shut
22 down. They could continue to operate. The very
23 fact that Avenal was displacing energy from them
24 would result in GHG reductions. Sorry.

25 MS. DeCARLO: And do any of you have

1 anything you'd like to add to your testimony?

2 Okay, that concludes staff's direct
3 testimony. The witnesses are available.

4 HEARING OFFICER FAY: Okay. Would you
5 like to move your exhibits at this time?

6 MS. DeCARLO: Yes, please. Can we move
7 section 4.1, pages 71 through 90 of exhibit 200.
8 That is the air quality appendix air-1, greenhouse
9 gas emissions. And the MRW report, exhibit 203.

10 HEARING OFFICER FAY: All right, any
11 objection?

12 MR. SIMPSON: Yes.

13 HEARING OFFICER FAY: Is this your
14 continuing objection about not receiving the --

15 MR. SIMPSON: No, sir.

16 HEARING OFFICER FAY: Okay. What is
17 your objection?

18 MR. SIMPSON: This was submitted --

19 HEARING OFFICER FAY: What do you mean
20 by "this"?

21 MR. SIMPSON: Pardon?

22 HEARING OFFICER FAY: When you say
23 "this"?

24 MR. SIMPSON: What she'd like to move
25 into evidence, the greenhouse gas section of the

1 FSA.

2 HEARING OFFICER FAY: The FSA, yes?

3 MR. SIMPSON: This is not what was in
4 the PSA, and we haven't had a chance for discovery
5 on this item, or the report it's based on.

6 HEARING OFFICER FAY: Okay. Response,
7 Ms. DeCarlo?

8 MS. DeCARLO: There is some -- our
9 process for evaluating greenhouse gases has
10 evolved from the PSA. This does not contradict
11 anything we identified or concluded in the PSA.
12 It simply is an expansion and a more in-depth
13 analysis.

14 The FSA was filed, served, sent to all
15 the parties on our service list. It was made
16 available through the website. It's been
17 available for quite some time now. So all
18 intervenors and public have had plenty of time to
19 review the analysis.

20 The FSA was identified on our exhibit
21 list in the prehearing conference statement, as
22 was the MRW report.

23 So there's been no lack of notification
24 that these two issues were going to be the subject
25 of our testimony.

1 HEARING OFFICER FAY: What date was the
2 FSA filed on?

3 MS. DeCARLO: I believe that was June 2,
4 2009. Or June 4th, I'm sorry.

5 HEARING OFFICER FAY: June 4th. Okay.
6 And it was posted approximately that time?

7 MS. DeCARLO: Yes.

8 HEARING OFFICER FAY: So it was
9 available to the public from that date.

10 MS. BROSTROM: I would like to second
11 the objection because we were not given a chance
12 to have a response to comments on anything that is
13 in this appendix 1, because it was not included in
14 the preliminary staff report, therefore the CEC
15 will not have to publicly respond to any comments
16 that were made about it.

17 MS. DeCARLO: Our greenhouse gas
18 analysis was included in the PSA. I'm not sure if
19 it was separately sectioned out as an appendix --
20 it was, I'm told it was.

21 So as I said before, this is no
22 different than our PSA analysis, a little bit more
23 expansive. But there's been plenty of opportunity
24 to comment. We had an FSA workshop where parties
25 were available. Ingrid, I know you were there, so

1 you had the opportunity to ask staff questions
2 about the analysis, as well as present your
3 comments.

4 HEARING OFFICER FAY: Was that the
5 additional workshop you held on June 23rd?

6 MS. DeCARLO: Yes, it was.

7 HEARING OFFICER FAY: And that was held
8 down here in Avenal?

9 MS. DeCARLO: It was.

10 HEARING OFFICER FAY: Okay. And you
11 responded in a supplement to your prehearing
12 conference statement after that workshop?

13 MS. DeCARLO: We issued an update
14 indicating one errata that had been called to our
15 attention.

16 HEARING OFFICER FAY: Okay. Are the
17 parties also aware that while you may be limited
18 at this point in your comments or response to
19 comments from the staff, of any comments you made
20 on their documents, that the Committee will be
21 publishing a summary of the evidence. That will
22 be out for 30 days, during which time you can
23 comment. And the Commission has an opportunity to
24 review all your comments before it makes a
25 decision on this case.

1 So, this is not like a usual EIR where
2 this might be your last -- the staff version might
3 be your last opportunity to comment. I just
4 wanted to point that out, because our process has
5 a ways to go still.

6 I'm going to overrule the objection and
7 admit the proposed testimony into evidence.

8 And the panel is now available for
9 cross-examination?

10 MS. DeCARLO: Available. Yes.

11 HEARING OFFICER FAY: Okay. Does the
12 applicant have any questions of this panel?

13 MS. LUCKHARDT: No, we've decided that
14 the presentation that they have provided is
15 sufficient; thank you.

16 HEARING OFFICER FAY: Okay. We have an
17 indication that some of the intervenors have
18 cross-examination, so we'll start with CRPE.

19 MS. BROSTROM: Thank you. And as an
20 initial note, during the preconference hearing our
21 testimony was rejected by the Commission.
22 However, you know, in hearing the testimony here,
23 much of it was in response to those comments.

24 And so I would just ask the Board to at
25 least allow those as public comments, CEQA

1 comments, if they're not included in the
2 testimony.

3 HEARING OFFICER FAY: And thank you for
4 bringing that up. I want to clarify that what you
5 provided that was not considered timely, and what
6 Mr. Simpson provided that, for a variety of
7 reasons, was not accepted as testimony, will be
8 considered as part of the record as comment.

9 So it is available to the Committee.
10 And in some cases I believe earlier the applicant
11 commented on some of that testimony. It will not
12 be received as formal testimony, but they still
13 chose to recognize it as comment.

14 MS. BROSTROM: I guess most of this is
15 going to be directed to the two authors of the
16 appendix A or appendix 1. A-1, thank you. Maybe
17 I'll start with Mr. Birdsall.

18 CROSS-EXAMINATION

19 BY MS. BROSTROM:

20 Q First, is CEQA one of the LORS that must
21 be met for CEC approval?

22 MR. BIRDSALL: The California
23 Environmental Quality Act is the underpinning of
24 the entire process, as I think you are aware. So,
25 we prepare our documentation with the goal of it

1 being consistent with that Act.

2 MS. BROSTROM: So the answer is, yes, it
3 is one of the LORS that must be met for project
4 approval?

5 MS. DeCARLO: Objection, I believe he's
6 answered the question. As well as it calls for a
7 legal conclusion.

8 HEARING OFFICER FAY: That really -- I'm
9 not sure this witness is qualified to answer that
10 question. That's really a legal question and --

11 MS. BROSTROM: Okay.

12 HEARING OFFICER FAY: -- you may wish to
13 address it in your brief, but it's something that
14 has been discussed at length among lawyers, I
15 know.

16 MS. BROSTROM: I do believe it is
17 mentioned in the staff report as being one of the
18 LORS, is that correct?

19 MS. DeCARLO: Objection.

20 HEARING OFFICER FAY: Well, let's --

21 MS. BROSTROM: It's written in the staff
22 report --

23 HEARING OFFICER FAY: -- at least, if
24 that's Mr. Birdsall's testimony, I think he can
25 answer that.

1 Did you note it in your testimony?

2 MR. BIRDSALL: I think I would prefer it
3 if you identify where it's mentioned as LORS,
4 because I think there's a distinction here.

5 The greenhouse gas appendix does
6 identify three basis LORS in greenhouse gas table
7 1. And one of those is the Global Warming
8 Solutions Act of 2006, AB-32.

9 The other one would be the mandatory
10 reporting requirements that the Air Resources
11 Board has adopted.

12 And then the third being the Public
13 Utilities' requirement about entering its coal
14 contracts and entering into contracts with power
15 producers that provide efficient energy,
16 essentially.

17 MS. BROSTROM: So your testimony is it's
18 not one of those three, I assume?

19 HEARING OFFICER FAY: You'll have to
20 speak up, Ms. Brostrom.

21 MS. BROSTROM: I'm saying I assume that
22 it's not one of those three that he mentioned, so
23 your testimony it is not in this report that CEQA
24 is a LORS.

25 MS. DeCARLO: If I could just offer, it

1 really does boil down to a legal issue. LORS is
2 -- what we identify as LORS are laws specifically
3 applicable to the project.

4 CEQA really is applicable to our
5 analysis of the project. So we generally do not
6 identify it as a LORS. We don't separate it out
7 in our LORS table. But all of our analysis is
8 done under the rubric of CEQA.

9 HEARING OFFICER FAY: Thank you for that
10 explanation of the staff position. I just want to
11 note that I did overrule staff's objection. And
12 thank you, Mr. Birdsall, for addressing what was
13 in your testimony.

14 But I think we should move on.

15 BY MS. BROSTROM:

16 Q Is this final staff assessment the
17 functional equivalent document for this project?

18 MS. LUCKHARDT: Objection. I think that
19 calls for a legal conclusion.

20 HEARING OFFICER FAY: Yes, again, a
21 complex question. It is not, I can answer you
22 that. The entire process that you're
23 participating in is the functional equivalent.
24 And so there is not a particular document, it is
25 this process, which accords more opportunity for

1 participation than the normal CEQA process. So it
2 has to be looked at as a whole.

3 MS. BROSTROM: A lot of my line of
4 questioning is going to be as to CEQA requirements
5 and whether they were met. So I'm just trying to
6 lay the groundwork, but if we can agree that this
7 is part of the functional equivalent document
8 process, we can all agree to that.

9 BY MS. BROSTROM:

10 Q Are you aware of the CEQA requirements
11 generally?

12 MR. BIRDSALL: Yes, I'm an environmental
13 professional and I've been preparing CEQA
14 documents for roughly about the past ten years or
15 so.

16 MS. BROSTROM: And so you're aware of
17 CEQA requirements concerning the setting of the
18 environmental baseline?

19 MR. BIRDSALL: Yes, I'm familiar that
20 CEQA establishes an environmental baseline for
21 projects that are subject to its review. And
22 normally the environmental baseline is set at the
23 beginning or the notice of preparation of a CEQA
24 document, which is essentially the beginning of
25 this proceeding. And so we'll call that 2008.

1 MS. BROSTROM: And you described briefly
2 in your initial testimony about how you set it in
3 this case. In your opinion, does the
4 environmental baseline set in this case, was that
5 set at the initial notice of preparation at the
6 beginning of this process?

7 MR. BIRDSALL: The baseline that I used
8 in my analysis is essentially 2008. And that
9 would be for air quality or greenhouse gas
10 emissions.

11 MS. BROSTROM: Can you describe how the
12 CEC determined its threshold of significance, not
13 for construction emissions, but for greenhouse gas
14 emissions?

15 MR. BIRDSALL: The threshold of
16 significance in the greenhouse gas analysis is
17 described under the heading called assessment of
18 impacts and discussion of mitigation.

19 And in that part of our writeup we have
20 a couple of sentences that provide the indication
21 that the impact of GHG emissions from a project
22 like this is taken in the context of its effect on
23 the overall system.

24 And then whether or not this project
25 would be successful in filling the roles that a

1 natural gas-fired project would be expected to
2 fulfill in the policy world that leads California
3 to the high renewables, low GHG future.

4 So, in a way, the threshold of
5 significance is a consistency with policy kinds of
6 thresholds.

7 MS. BROSTROM: And is this the first
8 case that has used this particular threshold of
9 significance?

10 MR. BIRDSALL: I'm not sure, because the
11 threshold of significance on other cases prior to
12 this, I think, has been effectively very similar.
13 And I'll leave it at that.

14 MS. BROSTROM: And just to be certain
15 about how you determined no project impact here,
16 on one hand it seems like you've said you're
17 comparing the total emissions existing as of 2008.
18 And you're comparing that with some time in the
19 future when this thing is built, taking into
20 account some conditional, you know, or --
21 conditional fact that may or may not happen in the
22 future.

23 I'd just like to really boil it down
24 into what was the measurement. Like when were the
25 two measurements taken as to the baseline and when

1 you measure what possible impacts were.

2 MR. BIRDSALL: The project impacts for
3 operation, which is what I think you're getting
4 at, they begin when the plant begins operating.
5 So that is necessarily sometime in the future.

6 The plant would begin operating, and
7 when it produces its electricity, and it burns the
8 fossil fuel that's associated with producing
9 electricity, that is when the impact occurs.

10 So that's obviously at a point to yet to
11 be determined. The characterization of the
12 impact, though, takes into recognition the direct
13 emissions that are caused by the power plant at
14 the power plant site, along with its indirect
15 effects of displacing energy provided by other
16 sources of electricity in the California system.

17 And so that is -- the impact analysis is
18 forward looking.

19 MS. BROSTROM: All right, so you'd say
20 2011? Or whatever the time period is that the
21 project's going to start?

22 MR. BIRDSALL: I think we have a 2012.
23 But there isn't a fixed single year.

24 MS. BROSTROM: Are you aware of the
25 requirements for mitigation, CEQA mitigation,

1 generally?

2 MR. BIRDSALL: Yes, generally I'm
3 familiar with CEQA and how it requires mitigation
4 of significant impacts.

5 MS. BROSTROM: And you're aware that
6 CEQA requires that mitigation be enforceable
7 within the project approval or the conditions of
8 approval?

9 MR. BIRDSALL: Yes. Again, I'm familiar
10 with CEQA's requirements for identifying and
11 providing information on mitigation.

12 MS. BROSTROM: Can you please name for
13 me the plants that will close or the plants that
14 will be displaced if Avenal is approved?

15 MR. BIRDSALL: I think we've already
16 described, as a panel, that there is no
17 requirements that any one plant shut down.

18 MS. BROSTROM: Can you show me in the
19 document where there's any enforceability of this
20 mitigation measure?

21 MR. BIRDSALL: Well, your question
22 implies that there's a mitigation measure, and I
23 don't know to what you're referring.

24 MS. BROSTROM: On page 4.1-79 there's a
25 heading called direct/indirect operation impacts

1 and mitigation. This is where the mitigation is
2 described where there'll be offsetting energy or
3 displacements. Do you contend that that is not
4 mitigation?

5 MR. BIRDSALL: That heading that you're
6 referring to on page 79, I guess, yes, I'm saying
7 that there is not a mitigation measure. What the
8 heading is referring to is the overall description
9 of impacts.

10 And then through the next few pages
11 after that, after we describe the role of Avenal
12 Energy in a variety of situations, for example,
13 the local generation displacement and other
14 potential goals that were identified in the MRW
15 report.

16 We don't conclude with mitigation,
17 however, because mitigation would only be
18 identified if there was a significant impact to
19 the environment.

20 MS. BROSTROM: Can you read for me from
21 page 4.172. It's the sentence starting right
22 after the bulletpoint that starts with: the
23 ability of.

24 MR. BIRDSALL: Right. I'd be happy to
25 read for you.

1 MS. BROSTROM: Just the one sentence,
2 "the ability of."

3 MR. BIRDSALL: Okay. This is page
4 4.172, first full sentence under the bullets.
5 "The ability of and the magnitude to which Avenal
6 Energy fulfills these roles are uncertain, given
7 that the project does not currently have a power
8 purchase agreement specifying its obligations and
9 roles within the system."

10 MS. BROSTROM: What role does this
11 uncertainty play in the enforceability aspect of
12 any mitigation or in your contention that there's
13 no impact?

14 MS. LUCKHARDT: I guess I have to object
15 because the questions keep referring to
16 mitigation. Whereas I think the witness has
17 clarified that he hasn't specified mitigation. So
18 I think there's a potential misleading aspect to
19 the question by constantly referring to
20 mitigation.

21 HEARING OFFICER FAY: I'm going to
22 sustain that because of the witness' answer
23 regarding his conclusion that after the analysis
24 there was no significant impacts, therefore it
25 wouldn't call for mitigation.

1 But, you may ask about how the
2 uncertainty affects their analysis.

3 MS. BROSTROM: Okay, how does that
4 sentence, or how does that uncertainty consider
5 into your conclusion that there is no project
6 impact?

7 MR. LAYTON: As I suggested earlier, the
8 staff believes that for every megawatt hour that
9 Avenal might generate, there would be a net
10 benefit, or net reduction of greenhouse gases.

11 What we can't determine is how much
12 Avenal will operate. That's the uncertainty. And
13 what specific roles this plant might fit into in
14 the system --

15 PRESIDING MEMBER BYRON: Could you speak
16 up, please? The people in the back cannot hear
17 you.

18 MR. LAYTON: We're very uncertain how
19 this project might fit into the system, today,
20 tomorrow, next year. So the uncertainty comes
21 from, again, the power purchase agreement is not
22 in place specifying its obligations to a purchaser
23 of its electricity, so we cannot determine how
24 much this plant will operate.

25 HEARING OFFICER FAY: I really have to

1 ask people to speak up as loudly as you can, and
2 directly into the mic. It's just not fair to the
3 folks in the back, they're not hearing you.

4 MR. SIMPSON: Sir, is there any way to
5 stop the hiss from this amp?

6 THE REPORTER: I think it's the HVAC
7 system.

8 HEARING OFFICER FAY: It's being
9 explored. We'll keep working on it. And I
10 understand the problem. I'd just ask everybody to
11 be self conscious about how loudly you speak, and
12 clearly, so that the people in back can hear.

13 MR. SIMPSON: Do you mind if I turn it
14 away from me a little bit? It seems like it's --

15 HEARING OFFICER FAY: I'm going to let
16 Mr. Rexroad tend to that. No, Mr. Simpson, we
17 have other people who are familiar with the
18 system.

19 MR. SIMPSON: Thank you.

20 (Pause.)

21 MR. REXROAD: Just speak loudly and we
22 will try to get somebody in here to fix it. If
23 that one's hissing --

24 HEARING OFFICER FAY: Let's go off the
25 record.

1 (Off the record.)

2 BY MS. BROSTROM:

3 Q What is your response to the applicant's
4 contention that worst case scenario there's a
5 neutral impact?

6 MR. BIRDSALL: We took a look at the
7 applicant's own analysis of greenhouse gas
8 impacts. And the applicant prepared a pretty
9 different kind of analysis, in that it took a look
10 at forward energy forecasts, forward prices on
11 natural gas, coal and systemwide effects of
12 operating Avenal Energy in that context.

13 And when the applicant concluded that at
14 the worst it would be a neutral contributor to GHG
15 emission, I would have to agree. Because at worst
16 what will happen is the plant will be constructed
17 and the short-term emissions will occur. And
18 we've already talked about those being less than
19 significant.

20 And in the worst case the plant
21 essentially does not run, and it sits there as a
22 sunk cost and stranded assets.

23 MS. BROSTROM: So how often does the CEC
24 go further than even the project applicant in
25 determining less impact? I think it's quite

1 significant here that the CEC is saying there is a
2 benefit, while even the applicant says there may
3 be just a no, you know, --

4 MS. LUCKHARDT: I believe that that's an
5 incorrect statement of our position. Our report
6 does show a benefit. I believe that we are not
7 claiming that as a benefit or an offset, or
8 anything that the project should receive extra
9 credit for.

10 We are simply saying that. But the
11 analysis that we have, and that was done by Black
12 and Veatch, clearly shows a greenhouse gas
13 reduction based upon adding this plant to the
14 western grid.

15 HEARING OFFICER FAY: Okay, I'll take
16 that, Ms. Luckhardt, as an objection.

17 (Laughter.)

18 HEARING OFFICER FAY: It is sustained.
19 Try to narrow your questions as much as you can,
20 Ms. Brostrom.

21 MS. BROSTROM: Okay.

22 BY MS. BROSTROM:

23 Q On pages -- well, let me just ask you --
24 4.177, I believe, is that right? To what extent
25 would the replacement of more polluting energy

1 plants happen regardless of whether this power
2 plant is built or not?

3 MR. BIRDSALL: Well, I think you're
4 talking about comparing this proposed project to a
5 no-project scenario, maybe, if I can rephrase that
6 for you.

7 And certainly some replacement and
8 turnover of the California fleet will occur
9 regardless of whether Avenal Energy comes along.

10 And this analysis that we have shows that
11 Avenal Energy can help facilitate that turnover.

12 So I guess what I'm saying is that this
13 proposed project facilitates turnover, so it
14 essentially helps to accelerate the displacement
15 or retirement or replacement.

16 MS. BROSTROM: I seem to have read that
17 a lot of these contracts expire in 2020 regardless
18 of whether or not another project is built. Is
19 this a correct understanding?

20 MR. BIRDSALL: That's my understanding.
21 We've assembled these tables with contract
22 information from a variety of resources throughout
23 the CEC. So, yes, as it's shown in table 5, for
24 example, of the GHG section.

25 MS. BROSTROM: Now, I'm curious as to

1 what happens if there's a future credit and
2 trading program, and the extent to which some of
3 these emissions from projects closing will be
4 double counted with this one. Is this something
5 that you have considered?

6 MR. BIRDSALL: I have not looked forward
7 into a cap-and-trading program beyond what is
8 immediately foreseeable, which is there is a
9 potential for that kind of a program to occur. I
10 don't think any of us in this room can say how it
11 would exactly function.

12 MS. BROSTROM: It seems to me that some
13 of the benefit you're claiming is coming from the
14 closing of power plants in the future. And I'm
15 just, I guess the question is it's foreseeable at
16 this point that those closures will also be a
17 pollution credit that may go to some other energy
18 plant or somewhere else. So ostensibly it would
19 be double counting those pollution reductions.

20 HEARING OFFICER FAY: Is that a
21 question?

22 MS. LUCKHARDT: I guess I would object
23 because I believe she's mischaracterized the
24 testimony stating that plants would close.

25 MS. DeCARLO: Yes, staff has previously

1 clarified that their testimony was just that the
2 displacement would occur on a market level, and
3 that the other facilities would not necessarily
4 close down.

5 HEARING OFFICER FAY: Okay. Yeah, I
6 think this is speculative and I'm not going to
7 allow it.

8 I will say that you are five minutes
9 over the time estimate that you gave us. Do you
10 know how much more you've got, Ms. Brostrom.

11 MS. BROSTROM: I have one other section,
12 which is on the construction.

13 HEARING OFFICER FAY: Okay, all right.
14 You asked for 15 minutes; you're at 20 minutes
15 now.

16 HEARING OFFICER FAY: Okay. Let's go
17 off the record.

18 (Off the record.)

19 HEARING OFFICER FAY: We're back on the
20 record. Sorry for the interruption.

21 BY MS. BROSTROM:

22 Q I'll summarize the basic point here and
23 just real quickly.

24 You testified before that the CEC has
25 not set a threshold of significance here, is that

1 correct? For construction emissions.

2 MR. BIRDSALL: I explained before that
3 our threshold is significance is not one of a
4 quantitative threshold.

5 MS. BROSTROM: And you explained that
6 one of the reasons for that is any construction
7 would have some sort of emissions and it would
8 create, I don't know, complications. I'm --

9 MR. BIRDSALL: No. The idea of using a
10 threshold of significance that does not have a
11 quantitative limit or value is, frankly, pretty
12 common when CEQA documents address project
13 construction emissions for criteria pollutants,
14 for example.

15 There is a presumption that a certain
16 amount of construction has to occur to move the
17 world forward. The question is whether or not
18 that construction is occurring in a way that
19 causes a significant impact to the environment.

20 And for greenhouse gas emissions only,
21 we've selected, we've elected to look for
22 efficiency targets and use the efficiency targets
23 for the construction activity as being out metric
24 for determining whether or not the impact is
25 significant.

1 MS. BROSTROM: How are the
2 decisionmakers, you know, the Commission, and how
3 are the public able to judge whether or not the
4 impacts here have been mitigated if the CEC has
5 not set a quantifiable, or at least even definite
6 threshold of significance?

7 MR. BIRDSALL: Well, like I say, the
8 project construction occurring in a way that is
9 efficient is our metric. And the threshold,
10 setting a threshold of significance and describing
11 that in the CEQA document is certainly a point
12 that triggers lots of public question on many
13 cases, right.

14 And often it is a cause for debate. But
15 I think in this case, setting this kind of a
16 threshold is appropriate. And I don't mean to
17 imply that we will continue as an agency or as
18 staff, that we would continue to use this same
19 kind of threshold significance into the future.
20 But for not it's one that we believe is plausible.

21 MS. BROSTROM: And just as a final
22 question, you mentioned that there was a range
23 that you calculated. Could you just tell us what
24 that range is?

25 MR. BIRDSALL: Yes, sure, that's easy.

1 Based on other similar cases that are before the
2 Commission Staff right now, construction emissions
3 from this project would be on the order of 3000 to
4 7000 metric tons of CO2 equivalent. And that's
5 over the grand total of 27 months. After which
6 those emissions would cease.

7 MS. BROSTROM: That's it.

8 HEARING OFFICER FAY: Thank you. All
9 right. I guess we'll take a five-minute break and
10 they will work on the audio system and see what we
11 can do.

12 (Brief recess.)

13 HEARING OFFICER FAY: Ms. DeCarlo, do
14 you have any redirect in light of CRPE's
15 questions? Otherwise we'll go to Mr. Simpson.

16 MS. DeCARLO: Yes, I just have one quick
17 question for staff.

18 HEARING OFFICER FAY: Okay.

19 REDIRECT EXAMINATION

20 BY MS. DeCARLO:

21 Q You were asked on cross about the
22 shutdown of the coal plants, whether those would
23 occur with or without this project anyway.

24 Is your conclusion that the project's
25 greenhouse gas emission impacts are less than

1 significant dependent upon an assumption that the
2 project, Avenal, would displace coal?

3 MR. LAYTON: No, what the analysis lays
4 out is that there's a lot of different things that
5 are going forward. The coal contracts are
6 expiring. The power's going to have to come from
7 somewhere. Once-through cooling is going to be
8 replaced. That power is going to have to come
9 from somewhere, or that capacity and energy is
10 going to have to come from somewhere.

11 So there's a whole overlay. Whether
12 this project, in fact, replaces a specific coal
13 plant, we don't make any conclusions about that.
14 We just are trying to talk about the future going
15 forward and how there are a lot of changes to the
16 system. And you still need dispatchable gas as
17 one option in the dispatch order.

18 MR. BIRDSALL: And just to follow that
19 up, the table prior to the coal table that we were
20 talking about a minute ago shows that natural gas-
21 fired facilities in the Fresno area, and Avenal
22 Power would be very highly efficient and much more
23 likely to displace a number of those facilities in
24 the absence of imported coal.

25 MS. DeCARLO: That's all.

1 HEARING OFFICER FAY: Okay. Any
2 recross, Ms. Brostrom?

3 MS. BROSTROM: No.

4 MR. ASHLEY: I have just a very brief
5 question.

6 HEARING OFFICER FAY: You know, the
7 Sierra Club didn't identify that they were going
8 to conduct any cross on this, so --

9 MR. ASHLEY: Okay.

10 HEARING OFFICER FAY: -- I'm sorry.

11 MR. ASHLEY: I thought we got the --

12 HEARING OFFICER FAY: We're on a very
13 tight schedule. That's why I have to -- Madam
14 Chair, do you want to ask now, or do you want to
15 wait until Mr. Simpson?

16 ASSOCIATE MEMBER DOUGLAS: I will ask
17 now, actually, thank you.

18 HEARING OFFICER FAY: Okay.

19 ASSOCIATE MEMBER DOUGLAS: This question
20 is for anyone, whoever on staff feels most eager
21 to jump to the bait.

22 EXAMINATION

23 BY ASSOCIATE MEMBER DOUGLAS:

24 Q Mr. McClary stated that this plant --

25 HEARING OFFICER FAY: A little louder.

1 ASSOCIATE MEMBER DOUGLAS: Mr. McClary
2 stated that this plant represents a, or would
3 represent a net reduction in greenhouse gas
4 emissions should it operate, systemwide.

5 Are there any limitations to that in
6 your mind? Is that statement true regardless of
7 load growth, for example?

8 MR. VIDAVER: The only circumstance I
9 can think of under which Avenal would displace
10 higher -- lower emitting resources is borders on
11 purely theoretical.

12 If gas prices, the price at which Avenal
13 purchased natural gas was so low that despite
14 being less efficient than some other resource, you
15 would still find Avenal to be the cheapest
16 resource, and therefore procure energy from it,
17 you could have a case where Avenal would run and
18 the greenhouse gases would actually increase.
19 Because Avenal would be displacing a more
20 efficient resource.

21 But this is purely theoretical because
22 the gas prices in southern California are the
23 highest in the western interconnect.

24 HEARING OFFICER FAY: Again, right into
25 the microphone, directly, and loud.

1 MR. VIDAVER: Sorry. So that's really
2 not a realistic circumstance.

3 With load growth any system without
4 Avenal would be higher emitting than any system
5 with Avenal. No matter what rate of load growth
6 you assumed.

7 ASSOCIATE MEMBER DOUGLAS: In other
8 words, in a system with, for example, high load
9 growth, having Avenal would be, with the current
10 mix of electricity in our system, better than not
11 having it. But nevertheless, emissions could be
12 going up with load growth.

13 MR. VIDAVER: Total system emissions
14 could be going up if all you did over the next ten
15 years was build Avenal, you would be increasing
16 the running really really inefficient gas-fired
17 resources. And your emissions would go up.

18 ASSOCIATE MEMBER DOUGLAS: Another
19 related question I have for staff -- or did you
20 have a comment, Mr. McClary? You look like you're
21 reaching for the mic.

22 MR. McCLARY: Well, I guess was your
23 question directed at high load growth scenarios
24 and how it would affect? Because I think there is
25 a flip side in that energy efficiency and

1 conservation measures could result in lower load
2 growth scenarios than we sometimes have.

3 Which I think it's been pointed out
4 before that that can result in it being somewhat
5 easier, in fact, to meet some of our renewable
6 resource goals if load growth is lower than we
7 current project.

8 However, I do --

9 HEARING OFFICER FAY: Excuse me, is the
10 mic switched on? And if it is, please just talk
11 directly into it.

12 MR. McCLARY: Does that make a
13 difference?

14 HEARING OFFICER FAY: The switch needs
15 to be towards you.

16 MR. McCLARY: Yeah, that's it. Okay.

17 HEARING OFFICER FAY: Just talk -- line
18 of sight, right into it.

19 MR. McCLARY: All right. This is a very
20 unidirectional mic. I think that in a lower load
21 growth kind of situation it may be somewhat easier
22 to meet percentage targets of renewable resources.
23 But that you still find a population of natural
24 gas-fired plants as part of the system.

25 And you still are addressing many of the

1 issues that have been identified here, the
2 replacement or retirement of once-through cooled
3 units, the replacement of an aging power plant
4 fleet.

5 Ultimately something done in the South
6 Coast area, for example, where the Avenal plant,
7 if it is, in fact, a more efficient generator than
8 the general population of natural gas-fired plants
9 that are meeting California demand, does result in
10 a net reduction systemwide of greenhouse gas
11 emissions.

12 ASSOCIATE MEMBER DOUGLAS: How do you
13 distinguish the analysis done in the MRW report
14 from say hypothetically if a coal-dependent
15 western state of the United States with less
16 investment in renewable energy and energy
17 efficiency than California has, was, to say, that
18 permitting marginally more efficient coal plants
19 was a benefit to the system because they would
20 reduce the net GHG emissions produced.

21 Therefore, the more coal plants, so long
22 as each was marginally more efficient, was
23 permitted, built and operated, the better from a
24 GHG point of view.

25 How do you distinguish the argument

1 you're making here for California from that
2 scenario?

3 MR. McCLARY: Well, I think the
4 challenge here is that what we're looking at are
5 the role that natural gas-fired plants play within
6 an overall strategy in California that's aimed at
7 reducing greenhouse gas emissions.

8 Now it might be, and this is, I suppose,
9 a hypothetical -- well, it is a hypothetical, but
10 that a state or another jurisdiction might
11 conclude that they would want to reduce greenhouse
12 gas emissions by building more efficient coal
13 plants than the current coal plants that they
14 have.

15 It's hard for me to envision how that is
16 part of an overall greenhouse gas reduction
17 strategy in any way comparable to what is being
18 addressed here in California. I mean it's coming
19 from a different perspective.

20 And I do think it's important to
21 recognize that the work that we've done, and in
22 fact, the analysis that has been discussed today,
23 is being done within a context that looks at
24 significant aggressive conservation goals and
25 renewable resource goals, which are going to be

1 difficult, in fact, probably to accomplish in any
2 case. But that those are presumed part of the
3 system of which this or any other natural gas-
4 fired plant would be.

5 It's not really a matter of making
6 natural gas-fired plants a bigger part, say, of a
7 strategy. It's honestly, as I perceive it, it's
8 part of sort of the minimal amount in some ways
9 that you could build natural gas-fired plants as
10 part of the greenhouse gas reduction strategy.

11 And one thing that our report did not
12 do, and is still a challenge, I think, facing the
13 Energy Commission, is to quantify some overall
14 goal as to an amount.

15 But that's within the context, as has
16 been said here, of several overlapping goals on
17 once-through cooling, aging plants, no more long-
18 term coal contracts. There's a lot of things in
19 here that make a single numerical goal very
20 difficult to pinpoint.

21 ASSOCIATE MEMBER DOUGLAS: So what I
22 heard you saying, which is helpful, I think, I
23 heard you saying this is gas, but not coal. I
24 heard you saying that there's a context of state
25 policy that natural gas plants may be a

1 fundamental part of. That it's purposefully aimed
2 at reaching greenhouse gas goals.

3 Are there other reasons that you'd like
4 to advance or clarify my understanding of what you
5 just said for how this circumstance, this analysis
6 is different than the possibly facetious example I
7 threw at you?

8 MR. McCLARY: Well, I think that about
9 covers it. There is this question that's been
10 raised about displacing coal that's imported into
11 the state in the long-term contracts.

12 And somewhat like renewable resource
13 targets, if, in fact, long-term contracts are not
14 allowed to be extended, new ones have been
15 prohibited and we do not extend them. That, in
16 effect, is putting a very high price on long-term
17 coal contracts, which makes coal less competitive,
18 if you will. Although competitive may be the
19 wrong term for it, since it's just excluded.

20 Something is going to take the place of
21 that generation. And if it's going to be gas-
22 fired generation that takes the place of that
23 coal, to the extent that it is, whether it's out
24 of state or instate, if you're providing more
25 efficient gas-fired generation you have a

1 reduction in greenhouse gas associated with the
2 more efficient gas-fired generation.

3 It also potentially opens the door to
4 greater renewable resource development to take the
5 place, as well, of that coal-fired generation.

6 I haven't heard today staff specify that
7 it has to do -- that this particular plant will do
8 one or the other. But it provides the option for
9 displacing that coal-fired generation with either
10 more efficient gas-fired generation, or with other
11 forms of generation as they come before the
12 Commission and are permitted.

13 ASSOCIATE MEMBER DOUGLAS: Right. And
14 state law does not restrict imports of coal on the
15 spot market or in ways other than long-term
16 contracts. My understanding of the applicant's
17 testimony is that you would need, according to
18 them, a \$35 or so greenhouse gas adder to make
19 natural gas competitive vis-a-vis the spot market
20 or the short-term imports that were actually --
21 that are actually ongoing.

22 MR. McCLARY: That's my understanding of
23 what the applicant's analysis did, was not to
24 assume long-term contracts or spot, but just to
25 assume that it's at a price, an economic market

1 price. And that, yes, by the time their analysis,
2 what we heard today was, by the time you added a
3 \$35 a ton adder to the coal price, then it was no
4 longer competitive with their projected gas-fired
5 price.

6 ASSOCIATE MEMBER DOUGLAS: Final line of
7 questions for now. And you started to get at it
8 in your comments.

9 In your view is there a numerical
10 quantitative limit, regardless of whether you can
11 identify it at the moment, to this analysis? For
12 example, if we were to permit a large combined
13 cycle power plant on every street corner in
14 California with the last having the same
15 greenhouse gas benefits as the first, or at some
16 point do you reach the stage of too much, in order
17 to meet our reliability needs and build towards
18 our greenhouse gas goals.

19 MR. McCLARY: Well, I think there would
20 be a point at which you would be conflicting with
21 other elements of the greenhouse gas reduction
22 program, like renewable resources, say.

23 But I think before that, can there be a
24 quantitative limit put on that? I don't think in
25 terms of say a given megawatt level. I think

1 there might be a way of -- it may be possible to
2 quantify it, but it would have to be more of a
3 formulaic approach than a quantity.

4 And it would have to take into account
5 factors like location, success of renewable
6 resource programs, revised demand forecasts. All
7 of those, I think, would have to be accounted for
8 in trying to say here's how much natural gas-fired
9 generation we would need.

10 Having said that, I don't think we've
11 approached that point. I think that, particularly
12 given the overlay of aging plants and plants that
13 we're going to have to do something about on the
14 coast, that are the once-through ocean-cooled
15 plants, that we've got a ways to go.

16 I can't give you a specific number. But
17 I think there may be a way of approaching that,
18 again formulaicly, rather than as a single number
19 target.

20 ASSOCIATE MEMBER DOUGLAS: You're saying
21 that there probably is a point of diminishing
22 returns, or over-building, so to speak. But, you
23 don't, in your opinion, we're not there?

24 MR. McCLARY: That's right.

25 ASSOCIATE MEMBER DOUGLAS: Okay, thank

1 you.

2 PRESIDING MEMBER BYRON: Madam Chair,
3 I'd just like to point out, we really didn't set a
4 standard against coal, we set an emission standard
5 of CO2 --

6 ASSOCIATE MEMBER DOUGLAS: Commissioner,
7 you are so right.

8 (Laughter.)

9 PRESIDING MEMBER BYRON: -- at 1100
10 pounds per megawatt hour, so.

11 ASSOCIATE MEMBER DOUGLAS: You are very
12 right. I stand corrected, and I should have
13 remembered that.

14 HEARING OFFICER FAY: Anything further
15 from the Committee?

16 ASSOCIATE MEMBER DOUGLAS: Not at this
17 time.

18 HEARING OFFICER FAY: Okay. All right.
19 We'll go ahead with Mr. Simpson's cross-
20 examination of the staff panel. Based on my
21 calculations of time, you've used well more than
22 half your time, so you may want to select
23 carefully. You've got about five minutes, give or
24 take, so.

25 MR. SIMPSON: Thank you. Is there any

1 way to turn off the hissing from this thing again?

2 HEARING OFFICER FAY: At this point I
3 think we're just going to have to live with it.

4 MR. SIMPSON: Can I turn it a little bit
5 so it's not facing straight towards me?

6 HEARING OFFICER FAY: Let's go off the
7 record.

8 (Off the record.)

9 HEARING OFFICER FAY: We're going to
10 start with Mr. Simpson's cross-examination of the
11 staff's greenhouse gas panel.

12 MR. SIMPSON: Thank you.

13 CROSS-EXAMINATION

14 BY MR. SIMPSON:

15 Q Mr. Birdsall, you're a consultant? You
16 work for Aspen?

17 MR. BIRDSALL: That's right. I'm a
18 contractor to the California Energy Commission,
19 and I fill the role as staff on this case.

20 MR. SIMPSON: I see. So, when you make
21 a report like this, do you have any liability or
22 does the CEC retain the liability?

23 MS. DeCARLO: Objection, relevance.

24 HEARING OFFICER FAY: He is a witness on
25 behalf of the staff.

1 MR. SIMPSON: Thank you.

2 HEARING OFFICER FAY: That's sustained.

3 MR. SIMPSON: Thank you.

4 BY MR. SIMPSON:

5 Q Do you carry EO insurance, errors and
6 omissions insurance?

7 MS. DeCARLO: Objection.

8 HEARING OFFICER FAY: Again, Mr.
9 Simpson, you should use your valuable time to
10 focus on relevant points.

11 MR. SIMPSON: Thank you.

12 HEARING OFFICER FAY: The staff is
13 completely responsible for the testimony of this
14 panel.

15 MR. SIMPSON: Okay.

16 BY MR. SIMPSON:

17 Q Are there any criteria pollutants that
18 are greenhouse gases?

19 MR. BIRDSALL: In our greenhouse gas
20 analysis we're focusing on CO2, methane, nitrous
21 oxides, SF6, sulfur hexafluoride. The criteria
22 pollutants analysis is separate.

23 And, no, I don't have any criteria
24 pollutants that I'm counting as greenhouse gases
25 on this project.

1 MR. SIMPSON: Did you just say nitrous?

2 MR. BIRDSALL: Nitrous oxide, N2O, is a
3 greenhouse gas, and that's quantified here in the
4 appendix.

5 MR. SIMPSON: I see. In the
6 construction analysis you say 3000 to 7000 metric
7 tons of greenhouse gas equivalent. Is that
8 lifecycle or that's just the construction? Is
9 that making the concrete and everything?

10 MR. BIRDSALL: These are the direct
11 emissions from the equipment onsite and the fuel
12 use to mobilize the workers and move the materials
13 to the site, and assemble the power plant.

14 So this is not lifecycle. We're not
15 looking at manufacturing the steel in some far
16 away land.

17 MR. SIMPSON: Thank you. A couple of
18 you mentioned that any hour that it runs it will
19 reduce greenhouse gases. My understanding it'll
20 do 1.7 million tons of greenhouse gases a year.

21 Now, that first hour that it runs, if it
22 starts up and it only runs one hour, doesn't that
23 give you 7000 tons for construction, plus .38 tons
24 for emissions. So isn't the first hour 7000.38
25 tons?

1 MR. LAYTON: Mr. Simpson, we discussed
2 on average. I think that's raised several times.
3 On average. So if you want to pick one hour, I
4 don't think that's really a fair comparison and --

5 MR. SIMPSON: No, you just said any
6 hour.

7 MR. LAYTON: I said on average, if this
8 thing ran, it would be cleaner than what it
9 displaced. But, you know, there are instances
10 where there are dispatch orders that might be
11 different than most economic dispatch order.

12 However, on average, over a year, when
13 this thing runs it'll displace and reduce
14 greenhouse gases.

15 MR. SIMPSON: So, over a year, maybe
16 around 7000 hours?

17 MR. LAYTON: I do not know how long it's
18 going to run.

19 MR. SIMPSON: And there's 7000 tons
20 associated with construction?

21 MR. LAYTON: An insignificant amount for
22 construction, yes.

23 MR. SIMPSON: Well, 7000 tons.

24 MR. LAYTON: We found that to be
25 insignificant.

1 MR. SIMPSON: Well, it would come out to
2 on an average of a ton an hour over the first
3 year.

4 MS. DeCARLO: Objection, is that a
5 question?

6 HEARING OFFICER FAY: Yeah. Your
7 point's taken. I'm going to sustain the
8 objection. Don't make statements, just ask
9 questions of the witnesses.

10 MR. SIMPSON: Thank you.

11 BY MR. SIMPSON:

12 Q You talk about this facility displacing
13 other natural gas facilities because it's
14 competitive as far as emissions. But what's to
15 stop it from displacing solar or wind-generated
16 electricity? In today's regulatory scheme.

17 HEARING OFFICER FAY: The live mic has
18 to be right to your mouth.

19 MR. VIDAVER: A number of things. First
20 of all, most renewable contracts with load-serving
21 entities are must-take, meaning that whatever is
22 generated by the wind turbine or the solar project
23 is injected onto the grid and has to be paid for
24 by the utility or the buyer.

25 So it would be somewhat foolish for the

1 buyer to abrogate that contract or otherwise
2 refuse to take the energy.

3 Even if this were all done on the basis
4 of economics, the absence of a fuel cost or very
5 low fuel cost for solar/thermal, the absence of a
6 fuel cost for a wind generator means that even if
7 he doesn't have a contract, he can sell, offer the
8 power to the spot market at zero, or at a very
9 very low cost. So anybody buying energy would
10 happily buy the energy from that project.

11 The gas project, even when it's
12 efficient as Avenal, would be far more expensive.
13 So Avenal's generation wouldn't displace the
14 energy from the wind or solar project.

15 MR. SIMPSON: So did you just say that
16 it's more expensive to generate electricity this
17 way than it is with solar?

18 MR. VIDAVER: Once the projects have
19 been completed and both are capable of offering
20 power onto the grid, the wind and solar projects
21 are offering power at a lower price because they
22 have a lower variable cost of production.

23 MR. SIMPSON: Sounds like that's a
24 better deal.

25 MR. VIDAVER: Yes.

1 MR. SIMPSON: On page 4.1-81, Mr.
2 Birdsall, at the top of the page it says: While
3 Avenal Energy is close to Greater Fresno, local
4 reliability area is not physically located in the
5 area and may not be able to provide capacity
6 during some system operating conditions."

7 So, would it be better if the
8 electricity was for Fresno if the facility was
9 closer to Fresno? Is that what this is saying?

10 MR. BIRDSALL: This is a concluding
11 sentence in the discussion of the role of Avenal
12 Energy in local generation displacement.

13 And trying not to be distracted by the
14 noise, the conclusion is that Avenal Energy would
15 provide some local displacement, but because it is
16 not within the Fresno local reliability area, we
17 don't expect it to be able to provide the
18 displacement during all operating systems of the
19 grid.

20 And this is getting at the question of
21 whether or not the power plant is located or would
22 be located close to load. And although it's
23 located in a part of the state that allows it to
24 access northern and southern California, it's not
25 within the defined grid operators local

1 reliability area for Fresno.

2 MR. SIMPSON: I see. Further down on
3 the page, middle of the fourth paragraph, it says:
4 Should California reach its goal of meeting 30
5 percent of its retail demand in 2020 with
6 renewable energy, nonrenewable most likely fossil
7 fuel energy needs will fall by over 36,000
8 gigawatt hours per year. In other words, all
9 growth will need to come from renewable sources to
10 achieve a 33 percent RPS."

11 So is this document intended to override
12 the 33 percent RPS?

13 MR. BIRDSALL: No. On the contrary.
14 What this analysis is portraying is how, again
15 under the heading now, we're talking under the
16 heading of the role of Avenal Energy in the
17 integration of renewable energy.

18 Renewable energy, due to its
19 intermittent nature, as the panel has explained,
20 depends somewhat on some of the services provided
21 by natural gas-fired facilities.

22 And as California goes forward to the 33
23 percent goal and beyond, this need for these
24 natural gas-fired facilities and the services they
25 provide may diminish over time. And this is the

1 question that Chair Douglas was asking about just
2 a minute ago.

3 So I think this is all part of the same
4 path to the 33 percent goal.

5 MR. SIMPSON: Is that 33 percent goal,
6 is that a goal or a law?

7 MR. BIRDSALL: To be honest, I don't
8 know offhand. I believe there was an executive
9 order. I don't know what it takes beyond that to
10 make it a law.

11 MR. SIMPSON: I see. So, okay, ask
12 questions.

13 PRESIDING MEMBER BYRON: Mr. Simpson,
14 just to answer your question, it's an executive
15 order.

16 MR. SIMPSON: Executive order.

17 PRESIDING MEMBER BYRON: It's an
18 executive order. But there is some pending
19 legislation around it. Nevertheless, at the
20 Energy Commission we do treat it as though it were
21 the law.

22 MR. SIMPSON: Okay. So, --

23 ASSOCIATE MEMBER DOUGLAS: And, in fact,
24 Mr. Simpson, because it's an executive order it
25 is, in fact, applicable to us.

1 MR. SIMPSON: It is applicable?

2 ASSOCIATE MEMBER DOUGLAS: So, for
3 example, we could not decide that we had a
4 different target. It is --

5 MR. SIMPSON: Okay.

6 ASSOCIATE MEMBER DOUGLAS: -- the law,
7 from our point of view.

8 MR. SIMPSON: Well, when this statement
9 says all growth will need to come from renewable
10 resources to reach the 33 percent RPS, does that
11 mean approving this would be overriding that
12 executive order?

13 MR. LAYTON: Mr. Simpson, again the
14 discussion here talks about energy and the 33
15 percent renewables on energy. And we've talked a
16 lot about the various roles that these gas plants
17 provide. It's a lot of capacity.

18 So what Avenal is providing is capacity.
19 How much energy it provides, we again have stated
20 repeatedly that we don't really know how much
21 it'll operate. The 500 megawatts of capacity
22 are -- 500-plus, may have some role. How much
23 they operate and how much energy is different.

24 MR. BIRDSALL: So, to answer your
25 question, no, this isn't inconsistent because

1 growth is one thing, and the RPS deals with that.
2 And the analysis here for Avenal Energy deals with
3 other services besides serving simply statewide
4 average growth.

5 MR. SIMPSON: I see. Are any of you
6 familiar with the California Energy Staff report
7 from June of this year?

8 MR. BIRDSALL: I have not looked at
9 that.

10 MR. SIMPSON: Thank you.

11 HEARING OFFICER FAY: Better wrap it up,
12 Mr. Simpson.

13 MR. SIMPSON: Yes, sir.

14 BY MR. SIMPSON:

15 Q Greenhouse gas table 7, in here you show
16 it would not provide faststart capability, which
17 looks like a goal for the integration of renewable
18 energy. It shows that it would not be able to
19 satisfy or partially satisfy the local capacity
20 area; would not provide blackstart capability;
21 would not provide faststart capability, again with
22 the ancillary services; would not have low minimum
23 load levels.

24 Can a facility be designed that would
25 satisfy these? Would faststart technology satisfy

1 a number of these --

2 MR. BIRDSALL: This table that you're
3 pointing to is greenhouse gas table 7. This is
4 where we, at staff, take the five roles that come
5 from the MRW report and try to lay them out in a
6 list of questions that we can use to hopefully
7 gauge this project compared to other projects.

8 And to answer your question, yes, it is
9 possible to design combined cycle natural gas
10 facilities with faster startup capabilities than
11 Avenal Energy is proposing here.

12 But on the flip side, as Avenal Energy
13 has testified, and I do agree, this plant is
14 highly efficient on a steady state basis.

15 And so this table is providing
16 information to the decisionmakers to show that
17 Avenal Energy is not a fast startup under all
18 circumstances kind of a facility. But it is a
19 facility that does provide other services
20 according to these bullets that you skipped over.

21 For example, that it does provide rapid
22 ramping. And that it does provide regulation and
23 reserves when renewable energies disappear.

24 So this is a summary of how Avenal
25 Energy fits in with the five roles from the MRW

1 report.

2 MR. SIMPSON: And -- okay, well, if you
3 haven't seen this report -- thank you.

4 HEARING OFFICER FAY: Okay. Thank you.
5 Any redirect, Ms. DeCarlo?

6 MS. DeCARLO: No redirect.

7 HEARING OFFICER FAY: Okay. All right.
8 I believe that concludes our testimony on
9 greenhouse gas. Any followup questions from the
10 Committee? Okay.

11 This is a very important area for us,
12 and it's an emerging area. I know there's
13 frustration about quantitative aspects, but this
14 is something that the Committee, I know, is going
15 to be looking at very closely.

16 Rather than take a break at this time
17 because of the interruptions we've had, I'd like
18 to excuse anybody who is testifying solely on
19 greenhouse gases, and move directly into our
20 testimony on air quality.

21 (Pause.)

22 HEARING OFFICER FAY: Ms. Luckhardt, are
23 you ready?

24 MS. LUCKHARDT: I'm getting there.

25 HEARING OFFICER FAY: Okay.

1 MS. LUCKHARDT: Just pulling up --
2 sorry, it's a different binder.

3 HEARING OFFICER FAY: All right.

4 Off the record.

5 (Off the record.)

6 HEARING OFFICER FAY: Back on the
7 record.

8 MS. LUCKHARDT: Okay, in the area of air
9 quality the applicant calls Gary Rubenstein. Mr.
10 Rubenstein has already been sworn.
11 Whereupon,

12 GARY RUBENSTEIN
13 was recalled as a witness herein, and having been
14 previously duly sworn, was examined and testified
15 as follows:

16 DIRECT EXAMINATION

17 BY MS. LUCKHARDT:

18 Q Mr. Rubenstein, was a statement of your
19 qualifications attached to your testimony?

20 A Yes, it was.

21 Q Okay, and now I'm going to try and split
22 out the air quality exhibits, as well as I can,
23 from the greenhouse gas exhibits.

24 So then, in the area of air quality, Mr.
25 Rubenstein, from exhibit 1 you would be sponsoring

1 section 6.2 on air quality, the full appendix 6.2,
2 including appendices 6.2-1, 6.2-2, 6.2-3, 6.2-4,
3 6.2-5 and 6.2-6.

4 In addition you would be sponsoring
5 exhibit 2(a), 3(a), 3(g), 3(h), 7(a), 14(a), 18,
6 19(a) responses 4 and 5, exhibit 21(a), exhibit
7 25(c), exhibit 53, 58, 61 and 62.

8 A That's correct.

9 Q Do you have any corrections to your
10 testimony at this time?

11 A No, I do not.

12 Q Insofar as your testimony contains
13 statements of fact, are those facts correct to the
14 best of your knowledge?

15 A Yes, they are.

16 Q Insofar as your testimony contains of
17 statements of opinions, do they represent your
18 best professional judgment?

19 A Yes, they do.

20 Q And do you now adopt all these exhibits
21 as your sworn testimony?

22 A Yes, I do.

23 Q Okay. Now I've got a few questions for
24 you. Initially I'd like you to start with a
25 summary of your testimony.

1 A Certainly. In our analysis of air
2 quality impacts of the Avenal Energy project we
3 evaluated the project's regulatory compliance.

4 In particular we took a look at the air
5 district's requirements regarding best available
6 control technology. We performed an air quality
7 impact analysis. And we evaluated the project's
8 compliance with emission offset requirements.

9 Our analysis concluded that the project
10 would, in fact, comply with all applicable air
11 quality laws, ordinances, standards and
12 regulations.

13 We also took a look at the project's
14 impacts under the California Environmental Quality
15 Act. And for the purposes of that analysis we
16 looked at both localized impacts and regional
17 impacts.

18 Our analysis of localized impacts had
19 three components. The first component was an
20 assessment of best available control technology.
21 The reason for that is the best way to minimize
22 the environmental impacts of a project is to make
23 sure that it's using the cleanest technology
24 available. And our analysis insured that the
25 project did, in fact, use BACT level technology.

1 The second element of our localized
2 analysis took a look at the air quality impacts of
3 the project. That analysis was extremely
4 conservative.

5 We took a look at worst case weather
6 conditions; combined them with worst case
7 background air quality conditions; and combined
8 those with worst case operating conditions. Even
9 if the combinations of all three were not
10 physically possible.

11 That results in a gross overstatement of
12 the project's impacts. And nonetheless, with that
13 overstatement we concluded that the project's
14 impacts would not be significant in terms of
15 localized air quality.

16 Lastly, we performed a multipathway
17 health risk assessment, taking a look at the
18 potential impacts of toxic air contaminants for
19 the project. And that analysis also concluded
20 that the project would not result in any
21 significant impacts.

22 So, in short, as a result of these
23 analyses we concluded that the project would have
24 no significant localized air quality or public
25 health impacts.

1 The second part of our analysis took a
2 look at regional impacts of the project. And,
3 again, there were three different components to
4 that.

5 The first was the same best available
6 control technology analysis that I've already
7 discussed. The second was valuation of air
8 quality impacts, this time taking a look at the
9 potential for cumulative impacts. And we did it
10 in a couple of different ways.

11 One was by taking a look at the
12 project's impacts in combination with existing
13 background air quality levels. And our conclusion
14 that the project would contribute to existing
15 violations of state and federal standards for
16 ozone, PM10 and PM2.5.

17 In addition, we took a look at potential
18 for combinations of impacts from this project with
19 other reasonably foreseeable projects that are
20 close enough to the facility to where their
21 impacts might be combined. And which would not
22 have been reflected in the background air quality
23 data.

24 After consulting with the San Joaquin
25 Valley Air District, we concluded that there were

1 no projects in this category.

2 Finally, in order to address the
3 project's contribution to the existing violations
4 of state and federal air quality standards, we
5 took a look at emissions offsets to insure that
6 these offsets were adequate to mitigate any
7 potential regional cumulative impacts.

8 It's important, when discussion emission
9 offsets, to remember that offsets are not, in
10 fact, intended to address localized impacts. That
11 was part of the first set of analyses I discussed.
12 Rather emission offsets are intended to address
13 regional cumulative impacts under a regulatory
14 program that's been in effect since 1980.

15 In short, our conclusion was that for
16 cumulative impacts there were no significant air
17 quality impacts following the implementation of
18 mitigation. That mitigation's in the form of our
19 proposed conditions of approval for the project,
20 which include both -- or reflect, rather, both
21 best available control technology requirements and
22 the requirements for emission offsets.

23 Q And have you reviewed staff's proposed
24 conditions of certification?

25 A Yes, I have.

1 Q And do you disagree with any of those
2 proposed conditions of certification?

3 A No, I do not.

4 Q Okay. And then turning to the exhibit
5 W, the testimony that has been proposed by Mr.
6 Simpson, have you reviewed -- it would now be
7 exhibit 300?

8 A Yes, I have.

9 Q And how many topic areas did you see
10 addressed in exhibit 300?

11 A I saw two, the questions regarding the
12 interpollutant trading ratio between SOx or sulfur
13 oxides and PM, and issues related to ammonia
14 emissions.

15 Q And could you please address those
16 issues?

17 A Certainly. With respect to the
18 interpollutant trading ratio, Mr. Simpson
19 questioned the appropriateness of the district's
20 calculation of the trading ratio for the Avenal
21 Energy project.

22 Next he cited comments made by the U.S.
23 Environmental Protection Agency regarding an
24 interpollutant trade proposed for a different
25 project, the project located in Tracy.

1 Third, Mr. Simpson alleged that in a
2 recent rulemaking EPA recommended a SOx to PM
3 trading ratio of 40 to 1, and also suggested that
4 this ratio should be applied to the Avenal Energy
5 project.

6 And last, Mr. Simpson alleged that the
7 project's SOx emissions impacts are not mitigated
8 in contravention of the CEC Staff standard policy.

9 I took a look at all four of these
10 issues. With respect to the first point, the
11 district has provided a May 2007 -- excuse me, May
12 27, 2009 filing with the Energy Commission, which
13 I believe is exhibit 61, that explains in detail
14 the district's technical basis for the
15 interpollutant ratio proposed for this project,
16 which is, in fact, 1 to 1.

17 In reviewing Mr. Simpson's submittals I
18 do not see any flaws he identified in the
19 district's analysis. I'm not aware of any
20 concerns expressed by the USEPA or the California
21 Air Resources Board regarding this analysis or the
22 application of the analysis to the Avenal project.

23 With regard to the second point where
24 Mr. Simpson referred to an EPA comment regarding
25 an interpollutant trade proposed for a different

1 project, I reviewed EPA's comments on this
2 project, which are included in attachment K to the
3 FDOC, the final determination of compliance,
4 exhibit 58. And EPA did not, in fact, comment on
5 the proposed interpollutant trading ratio for the
6 Avenal energy project. Nor did they comment, at
7 least in writing, nothing that I've seen, on the
8 district supporting analysis for that
9 interpollutant trading ratio.

10 With respect to the third point that Mr.
11 Simpson raised, which related to a recent EPA
12 rulemaking, actually last year, regarding the SOx
13 to PM ratio, I believe that Mr. Simpson has
14 mischaracterized what was in EPA's document.

15 The EPA rulemaking specifically allows
16 local air agencies to develop locally appropriate
17 interpollutant trading ratios.

18 And to get some sense as to how variable
19 this notion of an interpollutant trading ratio
20 must be, I went back to the supporting technical
21 memorandum that was used to develop this ratio,
22 and which is available on EPA's website.

23 The ratio was based on a series of
24 several hundred modeling analyses that EPA did for
25 several regions of the country. And EPA adjusted

1 different variables to reflect uncertainty,
2 different emission rates, moving them up and down
3 to see what kind of a trading ratio they would
4 calculate.

5 And those several hundred modeling runs
6 they calculated trading ratios that went from less
7 than 1 to more than 300. So there's an enormous
8 range.

9 EPA then statistically analyzed those
10 results and determined what the 90th percentile
11 highest value would be from all of these runs,
12 from all of these sensitivity analyses from all
13 over the country. And those numbers were
14 generally in the high 30s, which EPA then rounded
15 to 40 to 1, which is what it put in the guidance
16 document.

17 The numbers that we developed for our
18 site-specific analysis for Avenal were less than 1
19 to 1. The number that the San Joaquin Air
20 District developed in its analysis specifically
21 for Avenal was less than 1 to 1. The number that
22 the air district developed for the entire San
23 Joaquin Valley is, in fact, less than 1 to 1.

24 All of those numbers are within the
25 range of results that EPA calculated across the

1 country. The difference is that EPA's recommended
2 number, as a default, if you don't have a site-
3 specific analysis, was very conservative and is
4 based on the 90th percentile highest value
5 anywhere in the country. Whereas I think the air
6 district in this case appropriately used local
7 data.

8 There's a good technical explanation as
9 to why these ratios vary so much around the
10 country and why site-specific analysis are so
11 important.

12 Coincidentally, there was an EPA
13 rulemaking a couple of months ago that I came
14 across. It was actually a notice of a proposed
15 permit for a project in York County, Pennsylvania,
16 that was proposing to use the default
17 interpollutant trading ratio of 40 to 1, SOx
18 emissions for PM10. Meaning they surrender 40
19 tons of SOx emissions to mitigate every one ton of
20 particulate.

21 I took a look at the nature of the
22 emission sources in York County, Pennsylvania.
23 And the annual SOx emissions are roughly 14 times
24 the annual particulate emissions in the county.
25 For every ton of particulates emitted in York

1 County, there are 14 tons of SOx.

2 Now if you take a look at Kings County
3 in California, or even the entire San Joaquin
4 Valley air basin, the numbers are reversed.
5 Because we use such low sulfur fuels for all of
6 our emission sources in California, there's
7 actually four times more particulate emitted than
8 SOx.

9 So, combining those two, there's a
10 seventyfold difference in the ratio between York
11 County, Pennsylvania, and the San Joaquin Valley.
12 And while that's only one element of the
13 calculation, it explains why there's some dramatic
14 differences in these ratios. And again, why local
15 analyses are most important.

16 With respect to Mr. Simpson's final
17 point on the PM trading ratio, he indicated that
18 he believed that the Avenal project has not fully
19 mitigated all of its sulfur oxide emissions.

20 I went through the calculations again
21 this morning. And using information contained in
22 the final staff assessment confirmed that, in
23 fact, all of the project's emissions, including
24 the SOx emissions, are mitigated at at least a 1
25 to 1 ratio. And as a result I don't believe that

1 Mr. Simpson's assertion is correct.

2 Q And what were Mr. Simpson's concerns
3 related to ammonia emissions?

4 A Mr. Simpson expressed two concerns
5 related to ammonia emissions. One was he believed
6 the ammonia slip limit of 10 parts per million was
7 too high. And second, he believed that the
8 project should consider using, or should be
9 required to use a urea-based emission control
10 system referred to as a NOxOUT ULTRA.

11 With respect to the ammonia slip level
12 the 10 ppm limit was included in the preliminary
13 determination of compliance issued by the
14 district. There were comments submitted by both
15 the Energy Commission Staff and CURE objecting to
16 that 10 ppm limit. The air district addressed
17 those concerns and explained why they believed the
18 10 ppm ammonia slip limit was adequate for this
19 project.

20 Nonetheless, the Energy Commission Staff
21 requested, and the applicant agreed, to an
22 additional condition, which is AQSC-10, which
23 requires the applicant to track its ammonia
24 emissions and if ammonia emissions exceed 5 parts
25 per million, the level suggested by Mr. Simpson,

1 the project has to undertake steps to evaluate the
2 SCR performance.

3 If the performance can't be improved,
4 then the applicant has to undertake steps to
5 replace the catalyst within a specified period of
6 time.

7 Consequently, I believe those concerns
8 have been fully addressed, both at the district
9 level and the staff assessment.

10 The second question raised by Mr.
11 Simpson related to the use and transport of
12 ammonia. And his suggestion that this be replaced
13 with a urea-based solution.

14 That kind of a suggestion might be
15 appropriate as mitigation if the staff had
16 concluded that there were significant unmitigated
17 impacts related to the transportation and handling
18 of ammonia.

19 I reviewed those portions of the staff
20 assessment and there are no such impacts.
21 Consequently, there is no need, under CEQA, to
22 evaluate alternatives such as this.

23 Nonetheless, Mr. Simpson is correct.
24 The NOxOUT ULTRA system is a commercially
25 available system. It is the latest in a series of

1 urea-based control systems that have been
2 marketed.

3 The systems are characterized or
4 referred to as urea-to-ammonia systems. And the
5 reason is that even though urea is transported to
6 the plant, there is an onsite processor that
7 converts the urea to ammonia. The ammonia is
8 injected into the exhaust to make the selective
9 catalytic reduction system work.

10 I would point out that once you make
11 that conversion what comes out the stack is
12 ammonia. It's not urea. And so it has absolutely
13 no bearing on what the ammonia slip levels are.

14 In fact, these systems are harder to
15 control because the conversion process from urea
16 to ammonia is not precise. And you have a varying
17 quality of urea -- or excuse me, a varying quality
18 of ammonia that's being injected.

19 The result of that is you actually have
20 more variability in the ammonia emissions. And
21 since you have to design these systems to maintain
22 an absolute maximum NOx level, the result is that
23 the ammonia levels will tend to fluctuate more.

24 So, if anything, the use of a system
25 like this would result in higher ammonia slip

1 emissions. But that was not the issue that Mr.
2 Simpson was raising, he was talking about
3 transport.

4 These systems, in the early versions,
5 were characterized by problems with the deposit of
6 urea crystals in the piping that transports the
7 ammonia mixture to the turbine exhaust. That's
8 because you get incomplete conversion of urea to
9 ammonia, and so you'll have some transport and
10 there'll be some deposits inside the plumbing.

11 We have a client that uses one of these
12 systems at a power plant in Hawaii. And despite
13 the fact that they take the unit down to clean it
14 regularly, meaning cleaning out the plumbing, they
15 still have the unit trip offline once every couple
16 of months simply because the deposits build up so
17 frequently.

18 As a result of all of those things I've
19 never seen a urea-based system in use in
20 combination with a NOx limit of 2 parts per
21 million on a combined cycle plant. That's such a
22 stringent limit that these kinds of fluctuations
23 and upsets simply can't be tolerated, which is why
24 I think these systems have not gained more of a
25 hold in the marketplace when applicable to ultra

1 low NOx combustion and SCR systems.

2 In short -- excuse me, the way that this
3 new technology addresses those deposit buildup
4 problems is they actually have a small heated
5 reactor. There's another gas-fired device.
6 There's a heater that's used to insure that the
7 conversion of urea to ammonia is complete, meaning
8 we have another combustion source with its own
9 emissions that we have to account for. And that,
10 of course, would simply add a different impact
11 that we haven't looked at.

12 In short, I believe that the current
13 aqueous ammonia system is adequate. There have
14 been no significant impacts identified with
15 respect to transportation or handling of aqueous
16 ammonia for this project. And as a result, I
17 think that system is more than appropriate for use
18 at the Avenal Energy project.

19 Q Mr. Simpson has raised a question in one
20 of his earlier filings on the appropriateness of
21 the PM10 emissions limit. Could you address that,
22 as well?

23 A Yes. Mr. Simpson questioned whether the
24 particulate emission limit from the project was
25 sufficiently low. The same comment was made by

1 CURE in their comments on the preliminary
2 determination of compliance.

3 Those comments were addressed by the air
4 district in attachment L to the final
5 determination of compliance.

6 In short, the district's conclusion was
7 that best available control technology for
8 particulate matter for this project consisted of
9 use of an inlet air filter, a lube oil vent
10 coalescer, and natural gas as a fuel. And I
11 concur with that determination.

12 Beyond those techniques it's my opinion
13 that any differences in the particulate emission
14 rates between different gas-fired turbines that
15 are the same size relate almost exclusively to the
16 experience and quality assurance techniques of the
17 firm that's conducting the source testing.

18 I've studied this issue extensively for
19 a number of years, and the data are unequivocal
20 that the emissions of particulates from gas-fired
21 combustion turbines are much lower, the typical
22 permit limits are, but the variability is so huge
23 that both regulators and project owners tend to be
24 extremely conservative in estimating those
25 emissions.

1 Projects that have exhibited higher or
2 lower particulate emission limits than Avenal, and
3 there are examples of both, merely reflect
4 differences in the risk tolerance of the project
5 developer in terms of how much they want to gamble
6 on being able to get good quality testing done.

7 In my opinion, if the particulate
8 emission limit for this project were lower than
9 what's currently proposed, there would be
10 absolutely no environmental benefit because the
11 real emissions wouldn't change. It would just
12 change the risk profile and what you have to do to
13 insure that the source test results came out
14 sufficiently low.

15 One real adverse effect, if you will, of
16 lowering the particulate emission limit is that it
17 would reduce the amount of particulate offsets
18 that would have to be surrendered.

19 Right now, the way the project owner
20 deals with this uncertainty is to surrender enough
21 offsets to mitigate the higher theoretical
22 emissions, even though the actual emissions are
23 much lower.

24 Consequently, if anything, reducing the
25 PM emission limit, as Mr. Simpson has suggested,

1 would not result in any environmental benefit, and
2 would result in less mitigation being provided.

3 Q And, Mr. Rubenstein, the Center on Race,
4 Poverty and the Environment made some comments in
5 their prehearing conference statement. And one of
6 them had to do with PM mitigation. Can you
7 address that comment?

8 A Yes. They raised questions about the
9 validity of the PM emission reduction credits and
10 the adequacy of the mitigation they provide. And
11 although they raised these questions, I couldn't
12 find anything in their submissions to explain what
13 the concerns actually were.

14 The only other issue they raised was the
15 adequacy of the SOx for PM trading ratio. And my
16 response to that is exactly the same as my
17 response that I gave to Mr. Simpson's similar
18 comment earlier.

19 Q And they also raised a concern about the
20 evaluation of environmental justice.

21 A Yes. CRPE argued that the staff's
22 analysis was deficient in its treatment of
23 environmental justice issues for this project. I
24 disagree.

25 The Presidential executive order that

1 CRPE cites as a reference requires that an
2 analysis address disproportionately high and
3 adverse human health or other environmental
4 effects of a proposed project or decision.

5 The language in that executive order is
6 very clear. To have an environmental justice
7 issue you first have to have a disproportionately
8 high and adverse human health or environmental
9 impact on low income populations.

10 Our analysis, the analysis of the air
11 district, and the analysis of the staff all show
12 that there are no significant air quality or
13 public health impacts associated with the project.

14 If there are no significant impacts,
15 there can be no disproportionately significant
16 impacts. As a result I believe that there is no
17 environmental justice issue that needs to be
18 addressed for this facility at this location.

19 Q And they've also expressed concerns
20 about cumulative impacts, including the Kettleman
21 Hills facility and the, for lack of a better term,
22 it's called the Sludge Farm. I'm not sure what
23 its exact name is.

24 A I believe that's a reference to the
25 Westlake Farms disposal facility, although there

1 may be another facility that they're referring to
2 as the Sludge Farm.

3 In any event, as I indicated in my
4 summary comments, we did several different types
5 of cumulative impacts analyses. Both of those
6 facilities are at a sufficient distance from the
7 project that one would not expect to find any
8 potential for cumulative impacts.

9 In fact, the worst case impacts for the
10 Avenal Energy project were all located either in
11 the immediate vicinity of the project fenceline or
12 no more than about three to four kilometers away,
13 two to three miles away.

14 As a result, my conclusion is the same
15 as the CEC Staff's which is that there's no
16 significant potential for cumulative air quality
17 impacts or public health impacts except, of
18 course, for the one I mentioned, which is the
19 cumulative contribution to existing violations of
20 state air quality standards. And those impacts
21 are addressed through the provision of offsets.

22 With respect to public health issues,
23 and I know we're just talking about air quality,
24 but the issues in this particular case are very
25 closely entwined. I also agree with the staff's

1 assessment that the proper way to address this is
2 through the use of very conservative screening
3 techniques to make sure that each individual
4 project has impacts that are below a level of
5 significance.

6 The significance levels that we
7 typically talk about for health impacts which are
8 increased cancer risk of either one or ten in a
9 million; an acute and chronic health hazard index
10 of 1.0. Those numbers are specifically designed
11 to insure that each individual project's impacts,
12 as assessed, are sufficiently low so that there is
13 no potential for cumulative impacts.

14 And one reason for that is there are no
15 accepted techniques for evaluating cumulative
16 impacts of toxic air contaminants.

17 The only example that I'm aware of where
18 this was even attempted was by the CEC Staff in a
19 case in San Francisco. And that extensive
20 analysis confirmed exactly the same conclusion,
21 that impacts of toxic air contaminants are very
22 localized. And that if you insure that a
23 project's impacts are below significance levels,
24 that there is no potential for significant
25 cumulative impacts.

1 Q And they also raised a concern regarding
2 the construction emissions analysis. I'm
3 wondering if you can address that concern, as
4 well?

5 A Yes. They suggested -- excuse me, CRPE
6 suggested that the CEC Staff had failed to
7 quantify the emissions associated with
8 construction of Avenal Energy project. And also
9 failed to require mitigation sufficient to reduce
10 emissions to a less than significant level.

11 I disagree with both of those. The
12 construction emissions were clearly quantified in
13 a detailed assessment contained in the AFC in
14 appendix 6.2.3. This analysis was reviewed and
15 summarized in chapter 4.1 of the final staff
16 assessment. And a table quantifying the
17 construction-related project emissions was
18 included as air quality table 8 in the AFC.

19 Based on their analysis the CEC Staff
20 then proceeded to recommend mitigation measures
21 sufficient to reduce construction impacts to a
22 less than significant level. Those mitigation
23 measures are contained in conditions AQSC-1
24 through AQSC-5.

25 And then finally, AQSC-7, as an

1 additional mitigation measure, the CEC Staff
2 requires something that goes beyond what the air
3 district requires. The CEC Staff required that
4 the applicant surrender its emission reduction
5 credits prior to the commencement of construction,
6 further insuring that all construction impacts
7 would be mitigated.

8 Based on all of that, I agree with the
9 staff's conclusion that with the implementation of
10 these mitigation measures, the air quality, public
11 health impacts associated with construction are
12 reduced to a less than significant level.

13 Q And then finally, we've recently seen
14 some comments from the district on construction
15 emissions. I'm wondering if you can address
16 those, as well.

17 A Yes. I believe the comments by the
18 district's planning staff may have missed some of
19 the mitigation that's provided for in the staff
20 assessment. And from the comments it would appear
21 that the district planning staff believed that all
22 of the mitigation for construction emissions was
23 contained in one condition, AQSC-5.

24 As I mentioned, there are six conditions
25 that deal with that mitigation. And I believe

1 that those measures, in combination, insure that
2 impacts are mitigated to a less than significant
3 level.

4 It's also important to note that the
5 project's construction, like that of any other
6 large project in the San Joaquin Valley, has to
7 comply with air district regulation 8, which is a
8 regulation governing construction emissions.

9 And the district has a CEQA guideline
10 that they refer to as the guideline for assessing
11 and mitigating air quality impacts. And that
12 guideline explicitly states that compliance with
13 regulation 8 insures that a project's construction
14 impacts will be mitigated to a less than
15 significant level.

16 So the air district, when it comes to
17 construction impacts, has exactly the type of
18 qualitative analysis that Mr. Birdsall discussed
19 earlier today in response to some questions.

20 And the Avenal project will comply both
21 with the CEC's conditions, and, of course, with
22 the air district regulation 8. And therefore, the
23 construction impacts are reduced to a level of
24 insignificance.

25 MS. LUCKHARDT: I have nothing further.

1 Our witness is available for cross.

2 HEARING OFFICER FAY: Do you want to
3 move all those exhibits at this time?

4 MS. LUCKHARDT: Sure. Would you like me
5 to read them back?

6 HEARING OFFICER FAY: I think we --

7 MS. LUCKHARDT: Or just move them.

8 HEARING OFFICER FAY: -- you just refer
9 to them, if it's all the exhibits that you listed
10 as Mr. Rubenstein's testimony, that would be
11 sufficient.

12 MS. LUCKHARDT: The applicant, at this
13 time, moves the exhibits listed under the
14 testimony of Mr. Rubenstein in the area of air
15 quality.

16 HEARING OFFICER FAY: Any objection?

17 MS. DeCARLO: I just have comment. With
18 regard to exhibit 58, the final determination of
19 compliance, we have asked Jim Swaney of the San
20 Joaquin Valley Air Pollution Control District to
21 be here to sponsor that exhibit in, if the
22 Committee would prefer it be officially sponsored
23 by the air district.

24 MS. LUCKHARDT: And that's acceptable to
25 us. We just wanted to be sure that it was in the

1 record.

2 HEARING OFFICER FAY: Great. So he'll
3 be here today?

4 MS. DeCARLO: Yeah, he is in the
5 audience right now, so we can call him up when
6 staff's testimony is ready.

7 HEARING OFFICER FAY: Okay, that's
8 terrific. Yes. So I hear no objection. We'll
9 receive those into --

10 MR. SIMPSON: I have an objection to
11 anything that's submitted in evidence --

12 THE REPORTER: Can you come close to a
13 mic, please.

14 MR. SIMPSON: Yes, I'm sorry, --

15 HEARING OFFICER FAY: Identify yourself
16 and speak into the mic.

17 MR. SIMPSON: I can't hear over there
18 anymore.

19 HEARING OFFICER FAY: Mr. Simpson, why
20 don't you take your place.

21 MR. SIMPSON: I can't hear -- the amp
22 over there.

23 HEARING OFFICER FAY: Or use the public
24 mic, if that's acceptable.

25 MR. SIMPSON: Okay. Is this on? That's

1 better, thank you.

2 I object to anything that's submitted by
3 the applicant that's after our opportunity for
4 discovery.

5 MS. LUCKHARDT: All --

6 MR. SIMPSON: Anything that amends the
7 AFC, the emission factors, everything that's after
8 our discovery opportunity shouldn't be admitted,
9 or we should have the opportunity to discover.

10 HEARING OFFICER FAY: All right. We
11 note that you sought to enter this case after the
12 close of formal discovery period. But, your
13 objection is noted. It's overruled. And we will
14 receive Mr. Rubenstein's testimony as identified
15 into the record.

16 Does the staff have any cross-
17 examination of the applicant's --

18 MS. DeCARLO: None.

19 HEARING OFFICER FAY: Okay. My
20 notations show that CRPE estimated about 15
21 minutes, but that was for both staff and
22 applicant. Do you have questions of the staff,
23 Ms. Brostrom?

24 MS. BROSTROM: Just --

25 HEARING OFFICER FAY: I mean questions

1 of the applicant.

2 MS. BROSTROM: Just a few.

3 HEARING OFFICER FAY: Just a few?

4 MS. BROSTROM: Yeah.

5 HEARING OFFICER FAY: How much time do
6 you anticipate?

7 MS. BROSTROM: For the applicant,
8 probably five minutes.

9 HEARING OFFICER FAY: Five minutes.

10 MS. BROSTROM: Or less.

11 HEARING OFFICER FAY: Let's go off the
12 record for a moment.

13 (Off the record.)

14 HEARING OFFICER FAY: Ms. Brostrom, you
15 may cross-examine the applicant.

16 CROSS-EXAMINATION

17 BY MS. BROSTROM:

18 Q I specifically just wanted to ask some
19 questions about your discussions about EJ and
20 health impacts. I'm not sure if that's more
21 relevant to the public health, but since you're
22 here and you brought it up, I'll go ahead and ask
23 them now.

24 First of all, you said that there was no
25 EJ impacts because there was no evidence of public

1 health impacts. And I just wanted to know how you
2 base your conclusion that air pollution has no
3 localized impact.

4 A I didn't say that, and that wasn't my
5 conclusion.

6 Q Okay, what was your conclusion about the
7 environmental justice consequences or impacts?

8 A My conclusion was that the project has
9 no significant air quality or public health
10 impacts. That all of the air quality and public
11 health impacts have been mitigated to a less than
12 significant level.

13 Q Does air pollution have localized
14 impacts --

15 A Yes.

16 Q -- on public health? Do you have any
17 quantification of those local air quality impacts?
18 And how can you demonstrate that those have been
19 mitigated quantitatively?

20 A There is an extensive discussion of the
21 localized air quality impacts on a quantitative
22 level both in the application for certification,
23 in the air quality chapter. And in the final
24 staff assessment, also in the air quality chapter,
25 and each of those chapters explains why the

1 conclusions reached that those localized impacts
2 are not significant.

3 There are similar discussions in both
4 the application for certification and the final
5 staff assessment in the public health sections.

6 Q Is there any discussion in those
7 analyses of the quantity of air pollution that is
8 mitigated versus the quantity of air pollution
9 that remains locally?

10 A No. And the reason is that the -- let
11 me withdraw that first no. The answer to that
12 question is it's yes, because there are
13 discussions of the impacts -- excuse me, of the
14 emissions after the creation or surrender, rather,
15 of emission reduction credits. But, as I said
16 earlier, those are regional impacts and not
17 localized impacts.

18 With respect to localized impacts, there
19 is no before-and-after comparison because the
20 project includes a number of mitigating features.
21 And there's no requirement that I'm aware of that
22 we evaluate a hypothetical project that does not
23 reflect those mitigating project features.

24 So those analyses all reflect the
25 application of the mitigation that was proposed by

1 the applicant, commonly referred to as best
2 available control technology.

3 Q So the emissions that are subject to the
4 ERCs, you would agree that those credits are over
5 50 miles away from the project site?

6 A I don't have the exact distances
7 memorized for all of them. I believe that many,
8 if not most, of those credits are from sources
9 located more than 50 miles away.

10 Q So it would be safe to say that those
11 emissions used by the ERCs have been mitigated in
12 other places?

13 A I'm sorry, but I don't understand the
14 question.

15 Q The emissions coming from Avenal Power
16 Plant are mitigated with credits that are reduced
17 from other places quite a distance away?

18 A As I said earlier, the regional impacts
19 of the emissions from the Avenal project are
20 mitigated by emission reduction credits from a
21 variety of locations.

22 Q Okay. So the only demonstration that
23 the localized impacts have been reduced to a level
24 below significance is the adoption of best
25 available control technologies and that sort of

1 thing?

2 A No. As I indicated, the two other parts
3 of the analysis that we did are relevant. One is
4 the air quality impact analysis where we
5 quantified the concentrations that people can
6 believe -- rather under very conservative
7 assumptions.

8 And also the multipathway health risk
9 assessment. Both of those are quantitative
10 analyses. We compare those impacts with
11 quantitative thresholds, and those contribute to
12 the conclusion that the project's impacts on a
13 localized basis are not significant.

14 Q Can you point to me somewhere in this
15 document where it talks about the threshold of
16 significance for the local air quality impacts?

17 A What document are you referring to?

18 Q This is the final staff assessment.

19 MS. LUCKHARDT: I'm just wondering if
20 that's a better question for the staff than --

21 MS. BROSTROM: I'm willing to ask the
22 CEC at that time.

23 HEARING OFFICER FAY: Maybe you should
24 hold that one for staff.

25 MS. BROSTROM: All right. I was just

1 responding to your assertion that there was a
2 threshold of significance, and I'm not sure that
3 there is. But I'll save that for the other side.

4 BY MS. BROSTROM:

5 Q You also mentioned that another reason
6 why there's no EJ impacts is because other
7 projects were too far from the Avenal Power Plant.
8 Is that correct description of your testimony?

9 A No.

10 Q Okay.

11 A What I had said was that we did a
12 cumulative impacts analysis in a couple of
13 different ways. One of the techniques was to look
14 for new projects that were not reflected within
15 background air quality levels, and which might
16 contribute impacts in the same location as the
17 Avenal Energy project.

18 And after consulting with the San
19 Joaquin Air District we concluded that there were
20 no such projects.

21 Q Are you aware of the ChemWaste
22 expansion?

23 A I have been made aware of that within
24 the last several days. I'm aware of the facility
25 and have known about it for quite some time.

1 Q Is it correct to say then that the
2 expansion is not reflected in your cumulative
3 impact assessment?

4 A That's correct, because the criteria
5 that we used in consultation with the Commission
6 Staff was to look for potential projects within
7 six miles of the Avenal Energy project because
8 that's a distance that I think we both agree,
9 conservatively, represents a range within which
10 projects might possibly have impacts that become
11 cumulative.

12 And the ChemWaste Management facility is
13 more than six miles away from the Avenal Energy
14 project.

15 Q Isn't it true that Kettleman City, the
16 community of Kettleman City, is one of the
17 communities that you looked at in your cumulative
18 health impact? Or is --

19 Q I believe we specifically looked at
20 impacts within Kettleman City in addition to
21 looking at the worst case impacts.

22 Q And isn't it true that the ChemWaste
23 facility is within six miles of Kettleman City?

24 A I'm not certain of that, but I believe
25 that that's correct.

1 Q Shouldn't the zone of impact take into
2 consideration the point of impact, which would be
3 the community, and the six-mile zone would
4 encompass the ChemWaste facility?

5 A Well, if anything, we might take a look
6 at point of maximum impact from our project,
7 which, as I said, was only three to four
8 kilometers away. And that would be under
9 conditions when the wind was blowing from the
10 northeast to the southwest, a fairly unusual
11 weather condition for the valley.

12 During that type of a wind condition the
13 ChemWaste Management facility would not have any
14 impact on Kettleman City, nor would our facility,
15 because the wind's blowing in the wrong direction.

16 That's why the analysis is more
17 complicated than just drawing circles on a map.
18 And, as I indicated, the six-mile radius has been
19 pretty well established as the reference measure,
20 if you will, to identify just the possibility of
21 potential cumulative impacts.

22 Even within that radius it's very
23 unusual to find two projects having air quality
24 impacts in the same time, simply because of the
25 dispersion characteristics in meteorology.

1 Q Is that discussion of wind dispersion,
2 is that found in the final staff assessment?

3 A It's in the application for
4 certification. And I believe there's a comparable
5 discussion in the final staff assessment, as well.

6 Q But you couldn't point me to a page?

7 A I could, if you like. There's a
8 discussion of meteorology on page 4.1-6 of the
9 final staff assessment. Background air quality is
10 on the next part, four pages.

11 And the issues in particular that we're
12 talking about which relate to cumulative impacts
13 are discussed in the final staff assessment at
14 pages 4.1-32 through 35, including a discussion of
15 localized air quality impacts.

16 I believe there may be a comparable
17 discussion in the public health section.

18 Q Just a final point. Are you aware of
19 the birth defect cluster in Kettleman City?

20 A I'm aware that there's some discussion
21 of that, yes. I don't have specific knowledge of
22 it.

23 Q Was that cluster taken into
24 consideration in any kind of public health or air
25 quality impact analysis in this process?

1 A If there is such a cluster, it wouldn't
2 make a difference in our analysis, and the reason
3 is that we have to insure that our project is
4 absolutely safe, regardless of whether it's
5 located next to a school or in the middle of the
6 desert.

7 The air quality requirements and public
8 health requirements are exactly the same,
9 regardless of the proximity of people.

10 We have to make sure that our worst case
11 emissions, combined with worst case background air
12 quality and worst case meteorology are within
13 acceptable limits no matter where the project is
14 sited.

15 We have to insure that our worst case
16 emissions and worst case meteorology result in
17 public health impacts that are less than
18 significant levels, no matter where the project is
19 sited.

20 So, it doesn't matter whether there is
21 an issue like that present at the community eight
22 miles away. We have to make sure that the project
23 is safe regardless.

24 Q But you would agree that the preexisting
25 medical condition of birth defects in Kettleman

1 City was not specifically analyzed in this
2 document?

3 A I cannot recall whether it was analyzed
4 in the FSA.

5 MS. BROSTROM: That's it, thank you.

6 HEARING OFFICER FAY: Okay. Mr.
7 Simpson, you indicated you wanted to cross-examine
8 the parties. And I'd just remind you that the
9 time you gave us was for both, so I'm charging
10 you, you know, it's a single block of time.

11 MR. SIMPSON: How much time was it?

12 HEARING OFFICER FAY: Well, you
13 estimated half an hour. We'll be taking a break,
14 so I'll have to interrupt you before you conclude
15 that. But, you know, if you spend 15 minutes on
16 the applicant, then there's only 15 minutes left.

17 MR. SIMPSON: And the air district is
18 going to come up at another --

19 HEARING OFFICER FAY: Well, that's part
20 of that, too.

21 MR. SIMPSON: So the --

22 HEARING OFFICER FAY: So if you have
23 questions for the air district, account for your
24 time. It's still 30 minutes.

25 MR. SIMPSON: Okay. So the air district

1 would be available for examination?

2 HEARING OFFICER FAY: Yes, when the
3 staff puts on their case. You'll offer the air
4 district representative?

5 MS. DeCARLO: Yes.

6 MR. SIMPSON: So I'm ready?

7 HEARING OFFICER FAY: Go ahead.

8 MR. SIMPSON: Thank you.

9 CROSS-EXAMINATION

10 BY MR. SIMPSON:

11 Q Is there another control technology that
12 wouldn't include the use of ammonia?

13 A Another control technology for what?

14 Q Like SoNOx?

15 A Like what?

16 Q S-c-o-N-O-x.

17 A Oh, ScoNOx.

18 Q Okay.

19 A That actually is now, it's got a
20 different name. In any event, yes, that
21 technology is theoretically available. It has not
22 been applied to a project of this size anywhere in
23 the world, to my knowledge.

24 To the best of my knowledge the largest
25 facility it's on is a 43-megawatt gas turbine in

1 Redding, California. And that facility has a NOx
2 level that is actually higher than what's proposed
3 for this project. That facility has a 2.5 part
4 per million NOx limit, whereas the Avenal project
5 will be subject to a 2.0 ppm NOx limit.

6 Q Does the limit, is that what it's
7 actually emitting, do you know?

8 A Well, the emissions from that ScoNOx
9 system, the EmeraChem system, is quite variable.
10 And, in fact, that Redding facility had a permit
11 condition that required the NOx levels be reduced
12 from 2.5 to 2.0 parts per million.

13 After the system was up and running for
14 a year or two, the NOx results were so variable
15 that the City of Redding asked for approval to
16 keep the NOx level at 2.5 parts per million and
17 the Shasta County Air District agreed with that
18 request.

19 Q But that's a small facility?

20 A That's the largest facility that system
21 has been installed on.

22 Q Is it used in Palomar?

23 A Is it used at?

24 Q The Palomar facility?

25 A In San Diego?

1 Q Yeah.

2 A No.

3 Q Well, they have the faststart technology
4 there?

5 A No, they do not.

6 Q At Palomar?

7 A That's correct. They do not.

8 Q Okay. So this -- I'm looking at this
9 air quality table 14 again. And where it shows
10 that the particulate matter, which is arguably the
11 worst thing for public health, is at 708 percent
12 of standard after the facility's upgrading.

13 And the SO2 is at 9 percent of standard.

14 But my understanding you're doing a one-to-one
15 trade with these things with your emission
16 credits, is that correct?

17 A Yes. Let me point out that the vast
18 majority, 99 percent of that 708 percent number,
19 is attributable to the existing background levels.
20 And as I mentioned during my testimony, our
21 project contributes to preexisting violations of
22 the state and federal air quality standards, which
23 is why we provide emission offsets. Our impacts
24 are less than 1 percent of those numbers.

25 And, yes, you are correct with respect

1 to the ratio of -- well, the percent of standard
2 is not really relevant for the interpollutant
3 trading ratio.

4 What you'd want to take a look at is the
5 background concentrations. Where you'll see, for
6 example, 24-hour PM10 is 351 mcg/cubic meter; 24-
7 hour SO2 is 7.9 mcg/cubic meter. Numbers similar
8 to those are included in the district's analysis
9 where they developed the air pollutant trading
10 ratio for this project.

11 Q Thank you.

12 HEARING OFFICER FAY: Is that all?

13 MR. SIMPSON: Yes.

14 HEARING OFFICER FAY: Okay. Any
15 redirect, Ms. Luckhardt?

16 MS. LUCKHARDT: I'm looking at this --
17 that's okay. No more.

18 HEARING OFFICER FAY: Okay. All right,
19 I'm going to interrupt the flow just a bit. And
20 before we go to the staff, I'm going to invite
21 people who have turned in blue cards already to
22 come up and make comments.

23 The first is Tom Frantz. Please give
24 your name, spell it, and we'd like to hear from
25 you.

1 And nice and loud for the people behind
2 you.

3 MR. FRANTZ: Tom Frantz from Kern
4 County. F-r-a-n-t-z. President of the
5 Association of Irrigated Residents. It's an air
6 quality group in the San Joaquin Valley. Members
7 in five different counties currently. We advocate
8 for air quality.

9 My comments concern the fact that this
10 project will definitely worsen our air quality.
11 The PM10, 2.5 amount of 81 tons per day, or
12 162,000 pounds, seems to me the offset is only
13 50,000 of that 162,000 pounds. So the other
14 112,000 pounds is not being offset. It's
15 worsening our air quality.

16 And that's above the threshold, the
17 offset, but not, you know, as you get up to that
18 threshold it's a huge amount of pollution.

19 And the fact they're using SOx, you
20 know, they're using ERCs of 50,000 pounds of SOx.
21 Yet they're adding in another 34,000 pounds of SOx
22 from their own facility, so it's a net reduction
23 of 16,000 pounds of SOx valley-wide. And that's
24 nothing compared to the increase in pollution. I
25 mean it's nothing compared to what they're trying

1 to decrease.

2 There's very small decrease in offsets
3 compared to what's being put out there. So our
4 air quality is going to get a lot worse.

5 Our PM2.5 right now in Bakersfield, the
6 last six years, has gotten worse. It's not
7 improving as the air district claims. It's
8 improved from, you know, 12 years ago, there was
9 some improvement back then. But the last six
10 years, the PM2.5 has gone up at the monitor at
11 California and Stockdale, about 3 percent a year
12 average, if you do a little averaging.

13 So, our air pollution is just getting
14 worse all the way around.

15 For their background readings I think
16 they should have used Arvin to be conservative.
17 Go to Arvin to look at the pollution levels for
18 ozone for the background. Don't use Hanford,
19 which is relatively light.

20 Arvin's at least 20 percent higher for
21 the one-hour and the eight-hour averages. And
22 it's directly downwind. It gets everything that's
23 in this valley. It's a great conservative
24 background measurement to use. Probably wouldn't
25 change too much in the final analysis, but I don't

1 want to see a precedent set where you just kind of
2 pick a monitor that has lower ozone readings here
3 in the valley instead of the highest, worst areas.

4 And then regarding greenhouse gases, I'm
5 on the environmental justice advisory committee
6 for AB-32. And we look very closely at language
7 in the law that says there shouldn't be any
8 backsliding in air pollution in impacted areas
9 such as the San Joaquin Valley, as they try and
10 solve the greenhouse gas issues.

11 Over and over the applicant and staff is
12 pointing out how this will reduce greenhouse gas
13 emissions, this project. Yet it's going to
14 increase pollution here in the San Joaquin
15 Valley. It's not right. It's an
16 environmental justice issue.

17 We recommend no new fossil fuel
18 generation for electricity in the San Joaquin
19 Valley. No increase in fossil fuel electrical
20 generation in this heavily air impacted region.
21 It just doesn't make sense otherwise.

22 If there is a reduction from some of
23 these other plants, because they're not used as
24 much once this one's online, you know, what it is,
25 5 percent, 10 percent? The efficiency that this

1 plant is over some of those other ones?

2 I'd like to see a quantification of the
3 greenhouse gas emissions that this plant would
4 really put out and see it mitigated. We've had
5 corn ethanol plants trying to come into the San
6 Joaquin Valley, and they had to mitigate
7 greenhouse gas emissions.

8 We had a refinery in Bakersfield that
9 wanted to expand. They had to mitigate greenhouse
10 gas emissions. How come this project does not
11 have to mitigate greenhouse gas emissions? That
12 doesn't make any sense to me. That once it goes
13 to the CEC instead of local authority, suddenly
14 greenhouse gas emissions don't have to be
15 mitigated.

16 The greenhouse gas emissions, or 90
17 percent of them, if there is some efficiency
18 improvement here, should be mitigated on a one-to-
19 one ratio. You get to go SOx to PM10 on a one-on-
20 one ratio, why not greenhouse gases?

21 You can put solar panels on homes and
22 you can do efficiency measures on homes and
23 buildings throughout the San Joaquin Valley and
24 then build your power plant. We'll call it even.

25 The attorney general has stepped into

1 various projects and said greenhouse gas emissions
2 are -- mitigation is required. So I don't think
3 you're exempt from that.

4 Thank you.

5 HEARING OFFICER FAY: Thank you, Mr.
6 Frantz. The next speaker is Shawn Smith with
7 Carpenters Local 1109.

8 PUBLIC ADVISER MILLER: I don't believe
9 he's here. I think he plans on coming back later
10 this evening.

11 HEARING OFFICER FAY: Okay.

12 PUBLIC ADVISER MILLER: So I've looked
13 for him in the building and couldn't find him. I
14 have a question for you.

15 HEARING OFFICER FAY: Yes.

16 PUBLIC ADVISER MILLER: Do you want any
17 other blue cards at this time, any other comments
18 at this time? Or do you want to save them for a
19 later --

20 HEARING OFFICER FAY: Yeah, let's hold
21 on.

22 PUBLIC ADVISER MILLER: 5:30, okay.
23 That's what I expected. Thank you.

24 HEARING OFFICER FAY: All right. We're
25 going to take a ten-minute break. And when we

1 come back the staff will present their air quality
2 witnesses.

3 (Brief recess.)

4 HEARING OFFICER FAY: We're going to
5 hear the staff's direct testimony on air quality,
6 I believe?

7 MS. DeCARLO: Yes, thank you. Mr.
8 Swaney needs to be sworn in.

9 HEARING OFFICER FAY: Please swear the
10 witness.
11 Whereupon,

12 JIM SWANEY
13 was called as a witness herein, and after first
14 having been duly sworn, was examined and testified
15 as follows:

16 THE REPORTER: Please state and spell
17 your name for the record.

18 THE WITNESS: I'm Jim Swaney; that's
19 J-i-m S-w-a-n-e-y.

20 DIRECT EXAMINATION

21 BY MS. DeCARLO:

22 Q Thank you, Mr. Swaney, for joining us
23 today. In what capacity did you review Avenal
24 Energy?

25 A With the San Joaquin Valley Air

1 Pollution Control District I am a permit services
2 manager. And so it is under my direction and
3 review that the final determination of compliance
4 was written.

5 Q And are you sponsoring the final
6 determination of compliance evaluation for the
7 Avenal Power Center project listed as applicant's
8 exhibit number 58?

9 A I am.

10 Q And do you have any comments on the FDOC
11 or the project, itself?

12 A No, I do not.

13 Q Okay. And now the applicant has
14 previously mentioned some comments that were filed
15 by the air district in this proceeding with regard
16 to staff's final staff assessment.

17 Is it your conclusion that staff has
18 sufficiently evaluated the project and insured
19 that all impacts are mitigated?

20 A Yes, it is. The genesis of that letter
21 is we have a separate section that deals with CEQA
22 issues. And we are in the process of
23 incorporating that section into our permitting
24 program.

25 This is the first time that they've

1 commented on a power plant proceeding. And I
2 really think that genesis of the letter was simply
3 the unfamiliarity that that staff is with the
4 Energy Commission process and how things were
5 presented on the Energy Commission website.

6 Q Okay, thank you.

7 MS. DeCARLO: Mr. Fay, I don't know if
8 you'd like us to have Mr. Birdsall sponsor his
9 testimony, as well, and have both available for
10 cross at the same time?

11 HEARING OFFICER FAY: Yes, please.

12 MS. DeCARLO: Okay. Mr. Birdsall has
13 already been sworn in.

14 Whereupon,

15 BREWSTER BIRDSALL
16 was recalled as a witness herein, and having been
17 previously duly sworn, was examined and testified
18 further as follows:

19 DIRECT EXAMINATION

20 BY MS. DeCARLO:

21 Q Mr. Birdsall, did you prepare the
22 testimony titled air quality in the final staff
23 assessment, exhibit 200?

24 A I did.

25 Q Was a statement of your qualifications

1 attached to this testimony?

2 A Yes, it was.

3 Q Do the opinions contained in the
4 testimony you are sponsoring represent your best
5 professional judgment?

6 A Yes, they do.

7 Q Can you please briefly discuss your
8 conclusions regarding whether Avenal Energy would
9 result in any significant adverse impacts to air
10 quality?

11 A Sure. And I'll be brief. The approach
12 that staff takes to assessing and evaluating a
13 project like Avenal Energy was pretty clearly laid
14 out by the applicant here.

15 What we take a look at first is the
16 baseline conditions of the area. And that
17 includes the regional, as well as local,
18 violations of particulate matter and PM2.5
19 standards, and ozone standards.

20 And these are violations that do occur
21 in the central valley. They occur with
22 persistency. And when we take a look at a project
23 like Avenal Energy, we take a look at whether or
24 not the project would contribute to those
25 violations. And indeed it would.

1 And then that triggers our work for
2 identifying the mitigation, because if the project
3 contributes to a violation of the standards then
4 we feel that that is a potentially significant
5 impact.

6 We move forward and then identify
7 mitigation. Mitigation on this project, as has
8 been discussed a little bit ago, is in the form of
9 the project achieving best available control
10 technology. And that has been verified by the San
11 Joaquin Valley Air Pollution Control District.

12 We also look to the offsets that are
13 being surrendered as a form of mitigation. The
14 offsets are required to be surrendered prior to
15 construction. That is mitigation measure AQSC-7
16 in my analysis.

17 And then we also identified some
18 additional mitigation measures for ammonia slip,
19 and that is because the applicant originally
20 proposed 10 ppm as the ammonia slip level. We
21 recommend that the condition of certification
22 AQSC-10 be incorporated to address that impact or
23 the impact of ammonia emissions to bring that to 5
24 ppm, which is our recommended target for them.

25 On the construction side of the project

1 we look to mitigating the emissions to the extent
2 feasible and using the best practices for
3 construction emissions controls.

4 These are identified in AQSC-1 through
5 SC-5. And these measures included measures and
6 practices that go beyond what the local air
7 district recommends for construction equipment.

8 And the local air district has
9 guidelines for construction impacts, as was noted
10 a little while ago. That the staff's mitigation
11 measures in AQSC-1 to AQSC-5 encompass those kinds
12 of recommendations, but go a little bit further as
13 Energy Commission Staff normally does on cases
14 just like this everywhere throughout the state.

15 With the measures that staff recommends
16 we feel that construction impacts would be reduced
17 to a less than significant level.

18 Then when it comes time for project
19 operation we take a look at the control
20 technologies that would be used, as well as the
21 offsets. And then the localized impacts of the
22 power plant, itself. And take all of these things
23 into consideration.

24 The potential impacts to PM10 and PM2.5
25 are addressed specifically by emission reductions

1 in the form of emission reduction credits of
2 sulfur oxides. And then there are some PM10
3 offsets, as well. Those are identified in tables
4 19 and 20 of my staff assessment.

5 For ozone impacts, or impacts to the
6 ozone -- due to ozone precursors, rather, the
7 applicant is offering emission reduction credits
8 of nitrogen oxides and VOCs, as well. And there
9 is no interpollutant trade related to the ozone
10 impact mitigation. But there is related to the
11 PM10. And we've heard about that, and I expect
12 we'll hear about it shortly.

13 I think with that, that will conclude my
14 overarching summary of my analysis. With the
15 requirement to surrender the offsets, with the
16 best available control technology, and with the
17 additional mitigation measure for ammonia slip,
18 we've concluded that the project would have less
19 than significant impacts. And that is on a
20 regional basis, as well as a local basis.

21 And I think with that I'll conclude my
22 summary.

23 Q Did the applicants provide sufficient
24 information regarding the ERCs for you to reach a
25 conclusion on whether they will provide sufficient

1 mitigation for the project impacts?

2 A Yes. The applicant did. And then the
3 San Joaquin Valley Air Pollution Control District
4 backed up the information that the applicant
5 provided in the various steps that led us through
6 2008.

7 The applicant identified the credits in
8 their application for certification in February of
9 2008. We began to look at those credits at that
10 time and the air district did, as well.

11 In the preliminary determination of
12 compliance that was released last summer, the air
13 district summarized those credits.

14 We, at staff, had numerous questions at
15 the time for the air district. And we put them
16 forward in a comment letter to the air district.

17 We also -- I, personally, went and
18 gathered information from the air district's
19 website on the inventory of credits that were
20 available. I took a look at the locations of
21 where the offsets are coming from. And I took a
22 look at the quantities of the offsets, as recorded
23 on the air district's public database.

24 And when conducting that due diligence I
25 was able to verify that the application did

1 include verifiable emission reduction credits.
2 And that the effect of the credits would be to
3 ultimately mitigate the project.

4 Like I say, we have had a long and
5 extensive set of discovery on the ERCs, as well as
6 on the interpollutant trade. And that was
7 beginning last summer.

8 Q Now, concerns have been expressed that
9 the SO2 reductions proposed as part of the
10 interpollutant trade are too far away to mitigate
11 for the project's local impact from PM2.5
12 emissions.

13 Can you please explain how the project's
14 use of proposed SO2 ERCs will mitigate the
15 project's emissions impacts?

16 A Yes, I can. SO2 is a very important
17 precursor towards particulate formation. And
18 that's something that is a trend and a phenomenon
19 that is well documented. It's established as part
20 of the air district's attainment plans.

21 When we take a look at the offsets that
22 are proposed to be surrendered for any project, we
23 do consider that this is a regional program. And
24 that the air basin is a shared resource. And that
25 reductions in sulfur oxides or any other pollutant

1 from one part of the basin do provide a benefit to
2 the other parts of the basin that share that same
3 air.

4 What we found for the sulfur oxides
5 credits was that many of them come from southwest
6 Kern County and oilfields there. And that's not
7 terribly far from here when you talk about the
8 entire valley, as a whole.

9 But it's far enough to require the
10 district to assess a distance ratio, so that for
11 every ton of emissions that Avenal Energy
12 proposes, there have to be 1.5 tons of credits
13 coming in from the bank.

14 And so all of the credits that Avenal
15 Energy proposes to surrender is part of the
16 package, and then is required by our condition, as
17 well as district conditions, to surrender, all of
18 the credits are far enough away to require this
19 distance ratio to be applied.

20 That means that the credits are coming
21 from more than 15 miles away. But they're all
22 from within this air basin, and within the
23 airshed.

24 The distance ratio of 1.5 to 1 insures
25 that there's a surplus of credits surrendered to

1 enable or allow, essentially, the Avenal Energy to
2 come along with its proposed emissions.

3 One thing I want to point out about this
4 sort of shared nature of the air basin and the
5 fact that the central valley is a very active bank
6 of credits, is that I'm personally working on a
7 case in Lodi which is practically a suburb of
8 Sacramento, but at the northern end of the San
9 Joaquin Valley. And that case is relying on
10 credits that are coming from Tulare County and
11 Kern County.

12 So there have been a lot of comments on
13 how this program really provides a local benefit.
14 Well, it has to be viewed as a program. And it
15 does provide benefits when there's an active
16 banking system.

17 Avenal Energy is happening also in a way
18 that does not rely upon credits coming from
19 outside the basin, so we haven't found a need to
20 discount any of the credits that are coming in.
21 We're taking those at their face value.

22 Q The intervenors suggest that the
23 appropriate SOx to PM2.5 interpollutant ratio
24 should be 40-to-1. Do you believe such a ratio is
25 appropriate to mitigate impacts in this case?

1 A No, I don't. The 40-to-1 ratio, as was
2 pointed out by Mr. Rubenstein a few minutes ago,
3 is a nationwide recommendation that is in the
4 preamble to a final rulemaking.

5 The rulemaking, itself, does not
6 establish a 40-to-1 ratio. And then the
7 nationwide nature of that ratio is couched with a
8 very clear explanation in the EPA's preamble that
9 local and regional differences, and local and
10 regional situations and circumstances with regard
11 to the inventory of sulfur oxides and the
12 inventory of particulate matter, as well as the
13 climate, the humidity and the meteorology of
14 regions can drastically affect what kind of a
15 ratio is appropriate.

16 So, we're not talking about the 40-to-1
17 ratio as being one that would be appropriate in
18 the central valley because the San Joaquin Valley
19 Air District has provided, as part of its
20 attainment plans, very extensive modeling -- and
21 this is all very public information -- very
22 extensive modeling on the sulfur oxides emission
23 inventory, as well as the particulate emission
24 inventory, and how these precursors interrelate.

25 The staff is accepting the valley air

1 district's 1-to-1 ratio, in short, because it is
2 very much supported by the attainment planning
3 work that the district has been doing. And it's
4 very much supported by the local modeling.

5 And also because the Air Resources Board
6 has reviewed those plans and signed off on them.
7 So we have some comfort in another statewide
8 sister agency having its chance to review and
9 comment on the district's attainment planning.

10 So, we're taking that ratio today. I'd
11 like to point out, though, that as the valley air
12 district and the USEPA implement that very final
13 rule that includes the 40-to-1 ratio, as that rule
14 becomes closer and closer to implementation, USEPA
15 and the valley air district may work out other
16 ratios.

17 I think that that's something that we
18 can't predict at this time, but I wanted to point
19 it out. And I noted it in the final staff
20 assessment that just because a 1-to-1
21 interpollutant trading ratio works on this case,
22 it doesn't mean that it will continue to work five
23 years down the road after the rules get set up a
24 little bit more rigorously.

25 Q And lastly, how was environmental

1 justice considered in your air quality analysis?

2 A The environmental justice is a two-step
3 analysis. The first step is to examine the case
4 for significant impacts. And after conducting the
5 full breadth of this analysis and then considering
6 the mitigation measures that I've drafted up, as
7 well as the mitigation or rather the requirements
8 of the district authority to construct, we find no
9 significant impacts.

10 And because the project impacts are
11 mitigated to a less than significant level, there
12 is no disproportionate impact to minority low-
13 income populations. That's the second step. And
14 we essentially don't get to the second step of
15 asking whether or not the impacts are
16 disproportionate because we found that the impacts
17 are less than significant to begin with.

18 Q Thank you. Does that conclude each of
19 your testimonies?

20 A Yes.

21 MS. DeCARLO: The witness is available
22 for cross.

23 HEARING OFFICER FAY: Okay, did you want
24 to move those exhibits?

25 MS. DeCARLO: Yes. That would be

1 section 4.1 of exhibit 200, our staff air quality
2 analysis. And the applicant's exhibit 58, the
3 final determination of compliance.

4 HEARING OFFICER FAY: All right. Any
5 objection? Hearing none, we'll enter that into
6 the record, both of those.

7 And before we open this up to cross-
8 examination, forgive me if you've covered this. I
9 just wanted to ask Mr. Swaney if you have, on
10 behalf of the district, satisfied yourself that
11 the applicant either has acquired and surrendered,
12 or will be able to surrender, the requisite ERCs
13 before construction.

14 MR. SWANEY: Yes, we are satisfied that
15 the applicant has obtained all the ERCs that are
16 necessary, and will surrender them in accordance
17 with the Energy Commission's condition on this,
18 which actually requires the surrender to occur
19 before we, ourselves, would require it to occur.

20 HEARING OFFICER FAY: Okay, thank you.
21 All right. Any cross from the applicant?

22 MS. LUCKHARDT: No cross.

23 HEARING OFFICER FAY: Okay. And CRPE,
24 you have some time.

25 MS. BROSTROM: Thank you. As a

1 preliminary matter, I'm concerned about the
2 absence of Karen Douglas. Is she going to be
3 privy to this discussion and --

4 HEARING OFFICER FAY: Well, all this is
5 transcribed. So the Chair has been called away;
6 she's the Chair of the Energy Commission. There's
7 a lot going on. But she is able to review all
8 your words as soon as the transcripts come out.
9 Which, by the way, we allow ten days to two weeks,
10 and it's posted online as soon as it becomes
11 available. So everybody will have access to that.

12 PRESIDING MEMBER BYRON: Ms. Brostrom,
13 I'm also -- there are five Commissioners that will
14 be making this decision. But you do have the
15 Presiding Member of this Committee here still with
16 you.

17 HEARING OFFICER FAY: The most important
18 decisionmaker is with you.

19 (Laughter.)

20 CROSS-EXAMINATION

21 BY MS. BROSTROM:

22 Q Can you describe -- I guess this is to
23 Mr. Birdsall, can you describe for me the
24 threshold of significance for localized air
25 pollution impacts?

1 MR. BIRDSALL: Sure. I can explain how
2 we conduct the analysis, and it is described in
3 the staff assessment, so I'll direct you to a
4 couple of pages in there.

5 The method of analysis and the
6 thresholds for significance are described on pages
7 4.1-20 to 4.1-21. Just a couple of paragraphs.
8 And it very briefly says that we consider, as a
9 threshold of significance, any contribution to a
10 violation of an ambient air quality standard to be
11 a significant impact.

12 And then in the form of mitigation, the
13 paragraphs go on to explain that we consider best
14 available control technology or control
15 technologies, and what effect they would have. As
16 well as the effect of emission offsets that are
17 required by Clean Air Act requirements.

18 So the threshold is simply that a
19 project causing or contributing to a violation is
20 deemed to have a significant impact.

21 MS. BROSTROM: And these attainment
22 standards, these are based on regional emissions
23 rather than local emissions, is that correct?

24 MR. BIRDSALL: No. The ambient air
25 quality standards are health-based standards. And

1 they apply anywhere. So right at the fenceline or
2 elsewhere in the region.

3 These are the California ambient air
4 quality standards and the national ambient air
5 quality standards that are set by the California
6 Air Resources Board and USEPA, respectively.

7 MS. BROSTROM: But the standards are
8 based on a violation of a district in terms of how
9 much air pollution is in that entire district, is
10 that correct? Maybe I should direct that to Mr.
11 Swaney.

12 HEARING OFFICER FAY: We'll need you to
13 pull the mic closer and speak up, please.

14 MS. BROSTROM: All right. I'm asking
15 about the air quality standards.

16 BY MS. BROSTROM:

17 Q And my question is isn't it true that
18 they are based on a district's emissions rather
19 than a local area's emissions.

20 MR. SWANEY: As Mr. Birdsall indicated,
21 the standard applies throughout the entire area.
22 So it is a local standard, it's a regional
23 standard, it's a statewide standard.

24 When you get into what happens within
25 districts, and if districts are -- their

1 nonattainment status may be different. And that
2 is based on how much out of attainment you are.

3 But looking at the actual attainment
4 level those are the same throughout the region.

5 MS. BROSTROM: What is the mitigation
6 ratio when you have ERCs that are 15 miles away?

7 MR. BIRDSALL: The air district requires
8 that 1.5-to-1 be surrendered when the ERCs are
9 coming further than 15 miles from the source.
10 That's -- I'd like to make a distinction that
11 that's a Clean Air Act requirement the air
12 district implements. And so that's part of the
13 determination of compliance from the air district.

14 And then separate from that is the
15 Energy Commission Staff analysis for a potentially
16 significant impact. And we don't have a set ratio
17 or a set -- we don't have a set factor for
18 penalizing credits that are far away.

19 But because the air district has the
20 1.5-to-1 ratio, we look at Avenal Energy and
21 realize and see that there are those additional
22 credits because of that ratio.

23 MS. BROSTROM: And how far away is
24 Stockton from the Avenal project site?

25 MR. BIRDSALL: I don't know exactly.

1 Let's say about 150 miles?

2 MR. SWANEY: Probably more like 180
3 miles.

4 MS. BROSTROM: Is that the farthest
5 point that emission reduction credit has been
6 purchased or obtained?

7 MR. BIRDSALL: I can't answer that
8 question exactly because I didn't draw the -- I
9 didn't quantify the mileage of every credit.

10 MS. BROSTROM: Is an emission credit
11 that is obtained 180 miles away the same -- would
12 have the same local impact as one purchased 15
13 miles away?

14 MR. SWANEY: From the air district's
15 regulations standpoint for a reduction that
16 occurred at the same location that it's going to
17 be used at we assess a 1-to-1 ratio for that.

18 If it's offsite, but within 15 miles,
19 the ratio jumps to 1.2. Anything over 15 miles
20 the ratio's at 1.5.

21 MS. BROSTROM: I understand that. I'm
22 asking the CEC Staff if, in their viewpoint,
23 whether the emission reductions 180 miles are
24 equivalent to emission reductions 15 miles.

25 MR. BIRDSALL: It really depends. And

1 I've worked on cases in all different parts of the
2 state, and you can take a very small and
3 specialized, or rather a very unpopulated airshed
4 like, let's say, at the northern coast.

5 And if you had a credit coming from 180
6 miles away, it probably would not have much or any
7 relevance to a source on the coast. That's
8 because of terrain, as well as jurisdiction.

9 Here in the central valley we do have a
10 wide open airshed. And it's managed consistently
11 under one agency that covers all of these counties
12 from San Joaquin County all the way down.

13 And so from my point of view, for CEQA
14 mitigation, I have essentially viewed the credits
15 from Stockton with an equal weight as those from
16 Kern County or Kings or Tulare.

17 MS. BROSTROM: Is your analysis of the
18 equivalence, does that appear anywhere in the FSA?

19 MR. BIRDSALL: Yes. I'd say that where
20 you'd want to look are the tables that summarize
21 whether or not sufficient ERCs are being offered.
22 And those tables are the final staff assessment
23 tables air quality 17, 18, 19 and 20.

24 And I think you're familiar with those
25 tables. And what those tables show are the values

1 of the ERCs. And then in answer to the question
2 of whether or not it would be sufficient to
3 mitigate the impact of the project. And there's
4 some surrounding text that supports that, as well.

5 MS. BROSTROM: So, --

6 HEARING OFFICER FAY: Ms. Brostrom,
7 pretty much getting to the end. Do you want to
8 wrap it up.

9 MR. SIMPSON: I'll yield time to her.

10 HEARING OFFICER FAY: Okay. Go ahead.

11 MS. BROSTROM: Thank you.

12 BY MS. BROSTROM:

13 Q Mr. Frantz had a public testimony --
14 offered public testimony or public comment that
15 the CEC is only mitigating the pollution above the
16 threshold of significance, is that correct?

17 MR. BIRDSALL: No, that's not correct.

18 I think what you're referring to is that the
19 district has a threshold for when offsets are
20 required. And some of the tables that I just
21 referred to, in fact it's really table 16, that
22 shows the district requirements.

23 And table 16 shows that according to the
24 district requirements there would not be a
25 requirement for Avenal Energy to surrender any

1 credits for SOx emissions. Meaning that Avenal
2 Energy wouldn't emit enough sulfur oxides to even
3 require offsets according to the district's rules.

4 But then I go further to show on table
5 20 that there would be potential emissions of SOx
6 from Avenal Energy. And I've taken a look at --
7 and this is my view of the offset package, which
8 is a little bit different from the district's
9 view. And according to my view there are
10 sufficient sulfur oxides credits being surrendered
11 by Avenal Energy to cover that liability.

12 So, I don't take into account the
13 district's threshold of when offset requirements
14 are triggered. And instead I look for mitigation
15 and our condition of certification SC-7 requires
16 that sufficient SOx offsets be provided.

17 So the quantity of offsets being
18 provided covers for those conditions that would
19 otherwise be exempt.

20 MS. BROSTROM: So there are offsets for
21 the entire, let's see, 160,000 pounds per day of
22 the PM?

23 MR. BIRDSALL: Maybe you can clarify. I
24 think you're talking about table 16 where there
25 the project's emissions would be a potential of

1 161,000 pounds per year, not per day.

2 MS. BROSTROM: Okay, per year, sorry.

3 MR. BIRDSALL: And then we go on to show
4 that in tables 19 and 20 that some of the SOx
5 credits would be used to mitigate that PM10
6 liability.

7 MS. BROSTROM: So the entire 161 has
8 been offset is what you're saying?

9 MR. BIRDSALL: Correct.

10 MS. BROSTROM: Why didn't you use the
11 Arvin air monitor as a measure of the air quality,
12 since the air quality from Avenal was south rather
13 than north?

14 MR. BIRDSALL: Well, Avenal's impacts
15 are not to the south. Avenal Energy does cause
16 impacts to the air basin, and that includes north
17 and south.

18 The Energy Commission practice on what
19 background and baseline conditions we consider are
20 to look at the closest stations. And to be
21 honest, I'm not familiar with the Arvin station.
22 But for most of the criteria pollutants the
23 nearest station is in Hanford or Corcoran.

24 MS. BROSTROM: For your assessment of
25 localized air emissions, your localized cumulative

1 impacts on page 4.135, is the two paragraphs
2 listed on this page, the location where the air
3 quality impacts are assessed? Or is there
4 someplace else?

5 MR. BIRDSALL: The discussion of
6 cumulative impacts is summarized on -- well, it's
7 present on page 4.135, like you pointed out.

8 We took a look at the work that the
9 applicant did in identifying reasonably
10 foreseeable future sources and found none. And
11 that's summarized in the final staff assessment.

12 To see the numbers and the impacts of
13 this project, because there were no other
14 reasonably foreseeable future cumulative projects
15 within the radius of impact that we were looking
16 for, to see the impacts of the project you have to
17 go back to the project-only tables, which are
18 tables 14 and 15.

19 I can let you know, though, that the
20 applicant's survey of projects and whether or not
21 there would be new projects coming on in the local
22 vicinity of Avenal, that was done prior to their
23 filing of the AFC. So that was done prior to
24 2008.

25 And when you and I were in the workshop

1 in June, just a couple of weeks ago, I was
2 concerned about the questions that you were
3 raising about the Kettleman Hills facility.

4 And I went and I asked the district
5 about that. And the response from the district
6 was that the application for the Kettleman Hills
7 facility and it's permit changes is so far
8 incomplete. Meaning that the Kettleman Hills
9 facility hasn't provided the air district with
10 enough information to move forward on that permit
11 application.

12 And when I found out that the air
13 district views that facility as having an
14 incomplete permit application, it gave me comfort
15 that any emissions increases from that facility
16 are still not reasonably foreseeable. Because not
17 only has that facility not filed a complete
18 application, but the permit that would come from
19 that application hasn't yet been issued.

20 So, it, at this point, doesn't fall into
21 reasonably foreseeable from my point of view.

22 MS. BROSTROM: Are you aware that the
23 permitting for the ChemWaste facility, those
24 applications have been completed at both the
25 county level and at the DTSC level?

1 MR. BIRDSALL: I'm looking at the air
2 district's work on the ChemWaste facility. And,
3 like I said, the air district told me there is a
4 public record on this, because these letters are
5 part of the air district's permitting action.
6 That the air permit application is still
7 incomplete.

8 MS. BROSTROM: Here it says, under your
9 localized cumulative impacts: Reasonably
10 foreseeable future projects are those that are
11 either currently under construction or in the
12 process of being approved by a local air district
13 or municipality."

14 I would again ask you if you have talked
15 to Kings County about its application as a
16 municipality under your own definition.

17 MR. BIRDSALL: I didn't, because what I
18 am looking for are criteria pollutant emissions
19 and how they would change. And the air district
20 is the agency that has that jurisdiction.

21 MS. BROSTROM: Are you aware of the
22 birth defect cluster in Kettleman City?

23 MR. BIRDSALL: I have been made aware of
24 it in the workshops and public comments that we've
25 heard.

1 MS. BROSTROM: Could that be considered
2 new information for the analysis of both public
3 health impacts and air quality impacts, given that
4 there is a existing medical condition in a
5 community close to this facility?

6 MR. BIRDSALL: I don't know because I
7 don't know if this is new information. And quite
8 frankly, it sounds like a kind of circumstance
9 that would be related to toxic air contaminant
10 emissions, or possibly some other environmental
11 effect that is not within my specialty.

12 I'm focusing on criteria air pollutants.
13 And the criteria air pollutants including
14 particulate matter and ozone generally do not lead
15 to these kinds of health effects.

16 HEARING OFFICER FAY: Last one, Ms.
17 Brostrom.

18 MS. BROSTROM: Yes.

19 BY MS. BROSTROM:

20 Q Can you describe where in the record, in
21 the FSA, there's a demonstration that the ERCs are
22 in surplus?

23 MR. BIRDSALL: The FSA does not discuss
24 whether or not the ERCs are surplus. We asked the
25 air district some pointed questions on that topic

1 in our public comments on the PDOC.

2 So when the Energy Commission wrote the
3 letter in August or so, I think, of 2008, we asked
4 the air district to respond to that topic, that
5 question. And it did so in the final
6 determination of compliance. And we were
7 satisfied with that answer.

8 HEARING OFFICER FAY: Any redirect, Ms.
9 DeCarlo?

10 MS. DeCARLO: Just one quick one.

11 REDIRECT EXAMINATION

12 BY MS. DeCARLO:

13 Q If the ChemWaste facility expansion
14 permit review process proceeds, will it be
15 required to conduct a cumulative impact analysis
16 of its impacts to air quality?

17 MR. BIRDSALL: That's a good question
18 because -- and to be honest, I don't know the
19 answer to that question -- because if the
20 ChemWaste facility is subject to a Kings County
21 CEQA process, then, yes, that process would
22 encompass cumulative.

23 If it is subject, and we know that it is
24 subject to air district permitting, the air
25 district's process may not specifically address

1 cumulative. But because the air district's
2 process is grounded in Clean Air Act requirements,
3 as well as other California requirements on toxic
4 emissions, I have assurance that there will be
5 other agencies conducting environmental review on
6 that facility when the time comes.

7 MS. DeCARLO: Thank you.

8 HEARING OFFICER FAY: That's all?

9 MS. DeCARLO: That's all.

10 HEARING OFFICER FAY: Okay. Thank you.

11 MS. BROSTROM: I have a response to her
12 question.

13 HEARING OFFICER FAY: You have recross
14 on just that?

15 MS. BROSTROM: Yes.

16 HEARING OFFICER FAY: Um-hum.

17 RECROSS-EXAMINATION

18 BY MS. BROSTROM:

19 Q Are you aware that there is already an
20 EIR out from Kings County, and it's not talked
21 about the Avenal Power Plant?

22 MR. BIRDSALL: No, I've not reviewed
23 that document.

24 HEARING OFFICER FAY: On what project?

25 MS. BROSTROM: Sorry. Yeah, it's on the

1 ChemWaste project submitted -- or reviewed by
2 Kings County, that does not talk about the Avenal
3 Power Plant.

4 MR. SIMPSON: Can I still get a few
5 minutes?

6 HEARING OFFICER FAY: No. I understood
7 you to have surrendered your time. And we gave
8 CRPE the 15 minutes that I heard you surrender.

9 MR. SIMPSON: Oh, I thought I had 30
10 minutes.

11 MS. BROSTROM: You did have 30 minutes.

12 HEARING OFFICER FAY: You did, in total.
13 And you'd used half of it.

14 MR. SIMPSON: Oh. Well, can I get five
15 minutes?

16 HEARING OFFICER FAY: Take five minutes.

17 MR. SIMPSON: Thanks.

18 CROSS-EXAMINATION

19 BY MR. SIMPSON:

20 Q Is there a date on these ERCs?

21 A The date on the ERC will be the date
22 that the reduction occurred. There's no other
23 dates associated with those.

24 MR. SIMPSON: So don't -- ERCs usually
25 have some date that they were generated? Is that

1 the date?

2 MR. BIRDSALL: That's the date the
3 reduction occurred, yes.

4 MR. SIMPSON: Do you know what date
5 those are? Do you know what year these ERCs were
6 generated?

7 MR. BIRDSALL: I don't have that
8 information with me, no.

9 MR. SIMPSON: Okay, I didn't see it in
10 the report, either.

11 So do we know if they're
12 contemporaneous?

13 MR. BIRDSALL: Per our regulations, once
14 a reduction occurs the reduction is still valid
15 into the future.

16 MR. SIMPSON: I see. Is the FDOC your
17 final action?

18 MR. BIRDSALL: Yes, it is.

19 MR. SIMPSON: I see. The notice
20 requirements, I noted -- first I have a question.
21 When you introduced the FDOC, did you also
22 introduce the notice that's at the front of it in
23 the CEC --

24 MS. DeCARLO: All of that is --

25 MR. SIMPSON: -- website?

1 MS. DeCARLO: -- included as exhibit 58,
2 yes, in the applicant's --

3 MR. SIMPSON: So the notice is in there?
4 I see a number of notice requirements in your
5 FDOC, new major sources, major modifications,
6 offset thresholds over 20,000 pounds a year. And
7 a list of yeses in this chart on -- don't have a
8 page.

9 Did you provide notice that this is a
10 major source?

11 MR. SWANEY: No, we did not. And I
12 should direct your attention, section 5.4 of rule
13 2201, where those requirements come from.

14 What that section says is the types of
15 projects that require a public notice. It's
16 section 5.5 that goes on to say what the notice
17 has to entail.

18 MR. SIMPSON: I see. And is this
19 intended to be a federally enforceable operating
20 permit?

21 MR. SWANEY: This is federally
22 enforceable only so far as to the fact that our
23 NSR rule is a SIP-approved rule. The facility
24 will need to obtain a federal Title 5 operating
25 permit. They will need to apply for that within

1 12 months of startup.

2 MR. SIMPSON: And so you're subject to
3 40CFR70 as it says in the staff assessment here?

4 MR. SWANEY: And we will be addressing
5 that part of it once we process the Title 5
6 application. The FDOC is not intended to comply
7 with that requirement.

8 MR. SIMPSON: I see. In 40CFR70 there
9 are notice requirements for your existing permit
10 that I don't believe that you've met. Have you
11 looked at those?

12 MR. SWANEY: Those noticing requirements
13 will be complied with when we propose the draft
14 Title 5 permit.

15 MR. SIMPSON: So you'll be re-noticing
16 the FDOC?

17 MR. SWANEY: We will be noticing a Title
18 5 permit. It will not be a re-notice of FDOC. In
19 other words, it will not have an opportunity to
20 re-comment on the new source review requirements,
21 but only to the fact of what we are saying
22 complies with the federal requirements.

23 MR. SIMPSON: Okay. So 40CFR70.7 has a
24 number of requirements for the notice that you've
25 already provided. Do you know the address of the

1 facility?

2 MR. SWANEY: At the time our project
3 went out for notice it did not have a street
4 address.

5 MR. SIMPSON: I see. Did you offer an
6 opportunity for a public hearing?

7 MR. SWANEY: Yes, we did -- no, we did
8 not because that, again, is part of the Title 5
9 proceeding, it's not part of the new source review
10 notice.

11 MR. SIMPSON: I see. And so you didn't
12 notice that the -- did you notice anything about
13 air quality? Did you mention air quality in your
14 notice at all?

15 MR. SWANEY: Within the notice we
16 identified that we intended to issue an authority
17 to -- this gets into determination of compliance
18 for the proposed power plant. And --

19 MR. SIMPSON: I understand. Did it
20 reference air quality or the project's effect on
21 air quality?

22 MR. SWANEY: I'm telling you what was in
23 the notice. So, what you're asking for, no, that
24 was not in the notice. It's not required to be in
25 the notice.

1 MR. SIMPSON: I see.

2 HEARING OFFICER FAY: Last one, Mr.

3 Simpson.

4 MR. SIMPSON: Thank you.

5 BY MR. SIMPSON:

6 Q Oh, you mentioned your environmental
7 justice consideration, how you go through the
8 first step. And if it clears the first step, then
9 you go to the second step.

10 Have you ever made it to the second step
11 in a CEC proceeding?

12 MR. BIRDSALL: Personally in the, I
13 don't know, about ten or so cases that I've worked
14 on, I've not found a significant impact. And
15 that's because we work hard to identify
16 mitigation.

17 MR. SIMPSON: So that's no, you've never
18 made it to the second step?

19 MR. BIRDSALL: I have not.

20 MR. SIMPSON: Thank you.

21 HEARING OFFICER FAY: Okay. Anything
22 further, Ms. DeCarlo?

23 MS. DeCARLO: No.

24 HEARING OFFICER FAY: All right.

25 PRESIDING MEMBER BYRON: I think there's

1 a perhaps an opportunity for clarification here,
2 and I'm not sure if we have the right witnesses,
3 but it's my understanding that at the Energy
4 Commission we mitigate all impacts of our power
5 plant siting cases, isn't that correct?

6 MS. DeCARLO: Yes, that's true. Staff
7 insures that if it's going to recommend that t he
8 Commission approve a project, that all impacts
9 that have been identified have also been fully
10 mitigated. And we insure that the conditions of
11 certification that we recommend do so.

12 PRESIDING MEMBER BYRON: Thank you.

13 HEARING OFFICER FAY: What I'd like to
14 do, we are definitely going to break at just
15 before 5:30, maybe 5:23 or so, take a few minutes
16 for people to refresh themselves and promptly at
17 5:30 we'll have public comment.

18 At this time I'd like, since we're on
19 air quality, I'd like to take Mr. Simpson's direct
20 testimony.

21 And then I propose a change-up in the
22 order that was on the topic list, so that after
23 the public comment period we go into biological
24 resources.

25 Would that still help?

1 MS. DeCARLO: Yeah, that helps, though
2 if we get to it after 6:00, unfortunately Shelley
3 will likely not be available, Shelly from the U.S.
4 Fish and Wildlife Service. But we will still have
5 Richard Anderson to testify on behalf of staff.

6 HEARING OFFICER FAY: We're between a
7 rock and a hard place. Okay.

8 Mr. Simpson, you offered a number of
9 documents, one of which was considered appropriate
10 and relevant testimony. And it's a three-page
11 document entitled, Avenal testimony,
12 interpollutant trade.

13 All the parties have a copy of this, so
14 we won't let you read it. But did you want to
15 just state briefly what it's about and introduce
16 your testimony? Maybe I can help you get it
17 entered into the record. And then we'll make you
18 available for cross-examination.

19 MR. SIMPSON: Thank you.

20 HEARING OFFICER FAY: We have identified
21 Mr. Simpson's testimony I just described as
22 exhibit 300.

23 DIRECT TESTIMONY

24 MR. SIMPSON: My understanding of the
25 interpollutant trading, based on what I've read

1 from the EPA on the other case that's already been
2 identified, is that a 1-to-1 trade is not
3 appropriate for SOx to PM. Also that using PM10
4 instead of PM2.5 is also an outdated practice.

5 HEARING OFFICER FAY: Okay. And would
6 you like to introduce this testimony into the
7 record, as if read, as your testimony?

8 MR. SIMPSON: Yes, sir.

9 HEARING OFFICER FAY: Okay. Is there
10 any objection to receiving the document I
11 described, exhibit 300, as Mr. Simpson's
12 testimony?

13 MS. LUCKHARDT: At this time we would
14 object simply because we don't have any
15 information that Mr. Simpson is an expert in air
16 quality. So we'd like to have some foundation on
17 that. Unless it's brought in as like a citizen
18 witness other than an air quality expert.

19 HEARING OFFICER FAY: Well, Mr. Simpson,
20 do you want to voice an opinion on that? It would
21 make a difference in the time. If you seek to be
22 an expert they're going to question you on all
23 your qualifications as an air quality expert, your
24 education, your experience in that field, et
25 cetera.

1 MR. SIMPSON: I don't claim to be an air
2 quality expert.

3 HEARING OFFICER FAY: Okay. So, with
4 that stipulation?

5 MS. LUCKHARDT: With that stipulation I
6 have no objection.

7 HEARING OFFICER FAY: No objection,
8 okay. This will be entered, exhibit 300, as Mr.
9 Simpson's testimony.

10 Are you available for cross-examination?

11 MR. SIMPSON: Sure.

12 HEARING OFFICER FAY: Okay. Ms.
13 Luckhardt.

14 MS. LUCKHARDT: Okay, given that I just
15 have a couple of questions.

16 CROSS-EXAMINATION

17 BY MS. LUCKHARDT:

18 Q Mr. Simpson, on the first page of your
19 testimony at the bottom you have a number there,
20 33,521 pounds of SO2. And I'm wondering how you
21 calculated that number, or where that number came
22 from.

23 A I got this from Bob Sarvey.

24 Q Okay, so you didn't calculate it,
25 yourself?

1 A No.

2 Q Okay. So you can't explain how you got
3 it?

4 A Correct. Well, that's how I got it.

5 Q And then I had another question. On
6 page 2 in the section of ammonia emissions, the
7 second paragraph you have an acronym there, LGS.
8 I wonder if you could tell me what LGS means?

9 A No. I don't know.

10 MS. LUCKHARDT: Okay, I have no further
11 questions.

12 HEARING OFFICER FAY: Okay. Ms.
13 DeCarlo?

14 CROSS-EXAMINATION

15 BY MS. DeCARLO:

16 Q Just one question. Your comments, you
17 identify the FDOC allows an ammonia slip of 10
18 ppm. Were you present earlier when both the
19 applicant and staff testified that this was, in
20 fact, not the case?

21 A Yes.

22 Q And are you familiar now with AQSC-10,
23 which actually imposes a 5 ppm ammonia slip level?

24 A Yes.

25 MS. DeCARLO: Okay, that's all.

1 HEARING OFFICER FAY: Okay. Well, that
2 will conclude our taking of testimony on air
3 quality. And I think we can just squeeze in at
4 least the beginning of biology.

5 The staff is anxious to get a
6 representative from the U.S. Fish and Wildlife
7 Service on the line now.

8 MS. DeCARLO: Okay, we just need a
9 moment to set up the phone system and hopefully
10 it'll work.

11 HEARING OFFICER FAY: Okay, we'll go off
12 the record for just a moment.

13 (Off the record.)

14 HEARING OFFICER FAY: On the record.

15 MS. DeCARLO: Shelley, thank you for
16 being available.

17 DIRECT EXAMINATION

18 BY MS. DeCARLO:

19 Q Can you just give a brief description of
20 your involvement with regard to reviewing the
21 Avenal Energy project and discuss a little bit the
22 draft biological opinion that you've submitted?

23 A I'm sorry, could you please repeat that?
24 Someone interrupted me just a moment ago; I'm very
25 sorry.

1 Q Oh, sure, no problem. Can you just give
2 a brief description of your participation in the
3 review of the Avenal Energy project and the draft
4 biological opinion that you submitted to the
5 Energy Commission last week?

6 A Yes. I am the project biologist who
7 evaluated the materials received from the
8 Environmental Protection Agency, and communicated
9 with the EPA and the California Energy Commission
10 and the applicants regarding this project.

11 And I wrote the biological opinion,
12 which was then reviewed and signed by our
13 management staff. Eventually signed by Jen White
14 for Susan Moore, the Fish and Wildlife Field --
15 Sacramento Office Field supervisor.

16 Q And what's your official title with the
17 U.S. Fish and Wildlife Service?

18 A Fish and Wildlife biologist.

19 MS. DeCARLO: Would the Committee like
20 to ask her any questions, or should we proceed to
21 staff's testimony?

22 HEARING OFFICER FAY: Well, Ms. Buranek,
23 we just wanted to -- this is Gary Fay, the Hearing
24 Officer on the case. Thank you for speaking to us
25 on behalf of the U.S. Fish and Wildlife Service.

1 We just wanted to identify where the
2 biological opinion was in the process. I think
3 you've done that for us.

4 Are there any other questions of Ms.
5 Buranek before we let her go?

6 MS. BROSTROM: I was just --

7 HEARING OFFICER FAY: She's not a sworn
8 witness, and the BO is a public document. And it
9 will be what it is when it is published
10 officially. This is just a status report. Is
11 that what you intended, Ms. DeCarlo?

12 MS. DeCARLO: Yes, because Mr. Simpson
13 brought up at the prehearing conference that he
14 was concerned about the status of the BO. And so
15 we wanted to make sure that we knew where the Fish
16 and Wildlife Service was on it. And in response
17 they provided us with the draft last week.

18 HEARING OFFICER FAY: And can I ask you,
19 Ms. Buranek, based on your experience, when would
20 you expect that the final would be published?

21 MS. BURANEK: Okay, I, first of all I'm
22 only hearing part of the conversation. But I
23 believe the gentleman asked me when, with my
24 experience, I expect a final biological opinion to
25 be published. Is that correct?

1 MS. DeCARLO: Yes, that's correct.

2 MS. BURANEK: Okay. That is I do not
3 know. We are awaiting the Environmental
4 Protection Agency's comments. When those comments
5 are forwarded to us, we will review them, and
6 respond. And in that time the final biological
7 opinion will be signed and available.

8 But we don't control what happens at
9 EPA. So, it's dependent on them.

10 HEARING OFFICER FAY: Are we talking
11 perhaps 60 days, roughly, or double that? What?

12 MS. BURANEK: I honestly couldn't tell
13 you. That would be a question for EPA, as to when
14 they feel that they may get their comments back to
15 us.

16 And as far as how long after that, it
17 would depend upon the number of comments. If
18 there is just a small comment, one or two small
19 comments, the amount of time would be much
20 quicker. Whereas if there are extensive comments
21 then it will be a longer period of time.

22 I'm sorry I can't be more specific.
23 Once I'd respond to those comments, it may take
24 one to three weeks for it to make it through the
25 chain of signature.

1 HEARING OFFICER FAY: Thank you.

2 MS. BURANEK: But getting to that point,
3 can't tell you.

4 MS. DeCARLO: Okay, thank you.

5 HEARING OFFICER FAY: Thank you very
6 much.

7 And nothing further then for Ms.
8 Buranek?

9 MS. DeCARLO: Okay, so she can sign off
10 now?

11 HEARING OFFICER FAY: Yes, she can sign
12 off.

13 MS. DeCARLO: Thank you so much,
14 Shelley.

15 MS. BURANEK: Thanks -- bye, now.

16 MS. DeCARLO: Bye.

17 HEARING OFFICER FAY: Ms. DeCarlo, would
18 you go ahead and introduce your witness. And then
19 I'm not even sure we'll have time for a very brief
20 summary before we have to take our break, but give
21 it a try.

22 MS. DeCARLO: Sure. Mr. Anderson needs
23 to be sworn in.

24 HEARING OFFICER FAY: Please swear the
25 witness.

1 Whereupon,

2 RICHARD ANDERSON

3 was called as a witness herein, and after first
4 having been duly sworn, was examined and testified
5 as follows:

6 THE REPORTER: Please state and spell
7 your full name for the record.

8 THE WITNESS: My name is Richard
9 Anderson, that's A-n-d-e-r-s-o-n.

10 DIRECT EXAMINATION

11 BY MS. DeCARLO:

12 Q Mr. Anderson, did you prepare the
13 testimony titled, biological resources, in the
14 final staff assessment, exhibit 200?

15 A Yes, I did.

16 Q Was a statement of your qualifications
17 attached to this testimony?

18 A Yes, it was.

19 Q Do the opinions contained in the
20 testimony you are sponsoring represent your best
21 professional judgment?

22 A Yes, it does.

23 Q Can you please briefly discuss your
24 conclusions regarding whether Avenal Energy would
25 result in any significant adverse impacts to

1 biological resources?

2 A Yes. The project only had two issues.
3 The site is used for agricultural practices, and
4 it represents -- it no longer represents habitat
5 for many plants and animals that it once did.

6 It does, however, still offer foraging
7 and passage opportunities for the San Joaquin kit
8 fox, and foraging opportunities for the Swainson's
9 Hawk.

10 The site borders an important canal
11 right-of-way that offers habitat for connectivity
12 and genetic exchange, or a corridor it's sometimes
13 called, to other valley regions.

14 Due to the permanent and temporary
15 impacts from this project, 54.1 acres will be
16 protected in either the mitigation bank at
17 Kreyhagen Hill or Kern Water Bank. Additionally
18 all facilities will be set back from the canal by
19 300 feet. And the area on the applicant's
20 property adjacent to the canal right-of-way will
21 be managed according to recommended buffer
22 management guidelines.

23 Staff concludes that there will be no
24 significant adverse impact to biological resources
25 if the recommended conditions of certification are

1 required and implemented.

2 Q And can you please briefly describe the
3 extent that you coordinated with Fish and Game and
4 Fish and Wildlife Service to reach this
5 conclusion?

6 A Yes. Energy Commission Staff closely
7 coordinated and cooperated and communicated with
8 both the California Department of Fish and Game
9 and the U.S. Fish and Wildlife Service.

10 And this occurred over a period of many
11 months of emails, telephone calls and meetings.
12 And kind of finalized with a workshop in February
13 here in Avenal where the agencies and the
14 applicant agreed to the mitigation.

15 Q Does the draft biological opinion we
16 received last week from U.S. Fish and Wildlife
17 Service comport with staff's conclusions and
18 proposed mitigation measures in the final staff
19 assessment?

20 A Yes. The biological opinion mitigation
21 requirements are the exact same ones for kit fox
22 as the Energy Commission has, as the FSA has in
23 the biology resource section.

24 In addition, one of our conditions
25 includes complying with everything in the

1 biological opinion.

2 Q So if at any point in the future in
3 response to EPA comments that the BO is altered,
4 the certification would incorporate those changes,
5 as well?

6 A Yes.

7 MS. DeCARLO: Okay, I believe the
8 staff's witness available for cross-examination.

9 HEARING OFFICER FAY: All right, and
10 you're introducing --

11 MS. DeCARLO: Yes. Section 4.2-1
12 biological resources staff testimony in the FSA,
13 exhibit number 200.

14 And I don't believe you want the draft
15 biological opinion in the record, is that correct?

16 HEARING OFFICER FAY: It's your call
17 whether you -- but clearly it's not finalized.
18 That's yet to be. Did you want to introduce that?

19 MS. DeCARLO: We could introduce it,
20 sure. It's draft biological opinion on the
21 proposed Avenal Power Center, LLC, Avenal Energy
22 Power Plant project.

23 HEARING OFFICER FAY: And how is that
24 available to the parties?

25 MS. DeCARLO: That was docketed last

1 week on July 3rd.

2 HEARING OFFICER FAY: Okay. As
3 identified, we will call that exhibit 204. Is
4 there objection to receiving this portion of the
5 FSA and the draft BO, biological opinion into the
6 record?

7 And really, the only purpose of having
8 that draft is to confirm what Dr. Anderson has
9 testified to that the FSA and the draft are
10 consistent. The ruling document clearly is the
11 final biological opinion.

12 We need to take a break, but I know --
13 Mr. Anderson, are you available for awhile longer?
14 We've committed to a public comment period and I
15 don't want to cut off any of the parties. Mr.
16 Simpson indicated he wanted to ask questions on
17 biological resources. So I need to have you
18 available for that.

19 DR. ANDERSON: I am available.

20 HEARING OFFICER FAY: Are you? Okay.
21 How much time do you have, Mr. Simpson, on
22 biological resources, under the circumstances? I
23 mean given that the BO is in draft.

24 MR. SIMPSON: Can I answer that after
25 the public comments?

1 HEARING OFFICER FAY: Yes. Yeah, let's
2 do it that way. You think about it.

3 We're going to take a five-minute break.
4 We'll come back at the half hour and begin
5 receiving comments from the public.

6 I have blue cards. Anybody that is here
7 to comment who hasn't filled out a blue card, try
8 to contact the Public Adviser. And that will just
9 kind of help us be sure to call your name and get
10 it spelled correctly.

11 We're off the record.

12 (Brief recess.)

13 PRESIDING MEMBER BYRON: Good afternoon,
14 everybody. My name is Jeff Byron. I'm one of
15 five California Energy Commissioners. And I
16 thought it might be worthwhile, since this was the
17 time that we had scheduled for some public
18 comment, to just give you a little bit of
19 background. Maybe that would be helpful to you.
20 I'll just take a few minutes.

21 The way we do things at the Energy
22 Commission on our power plant siting cases, it's
23 one of the things that we do, we have about 25
24 cases before the Commission right now. So we
25 divide up into Committees of two, primarily to

1 cover each other. My Associate Member was here
2 for most of the day with me listening to evidence
3 during this evidentiary hearing.

4 But I'll be making a determination on
5 this case -- we call a Presiding Member's Proposed
6 Decision -- to my fellow Commissioners. They will
7 make the final determination on this.

8 And, of course, we do everything based
9 upon the evidentiary record. Some of you may have
10 been involved in this project for awhile. I was
11 here back in May of last year for the initial site
12 visit. And there's been a number of workshops
13 that the staff's conducted.

14 And our staff, thank goodness, is very
15 thorough and very good. They've made evaluations,
16 I believe, in about 23 different areas with regard
17 to the information that the applicant has
18 provided.

19 We maintain a separate relationship from
20 the staff. We call it the ex parte, and our
21 Hearing Officer, Mr. Fay, can explain that in more
22 detail. Because we really want the independence
23 of their evaluation and the information that they
24 provide.

25 There are some intervenors that are

1 represented here today, as well, who are
2 participating in our process.

3 We've been here most of the day
4 collecting evidence around these issues. And now
5 is the time to hear from the public, those of you
6 that can't participate in this process to this
7 kind of extent.

8 I'm here because I'm very interested in
9 your comments. I want to hear what you have to
10 say. And I think Mr. Fay will conduct that part
11 of the process. We'll try and answer the
12 questions that you might have.

13 But, again, this process has gone on for
14 awhile. And I hope some of you have been here
15 during the workshops, and that you've had most of
16 your questions answered.

17 I think we're going to take a little bit
18 -- a break a little bit later on for some dinner,
19 if this goes on. But I just want to assure you
20 that we'll stay here as long as we need to, to
21 make sure that everyone is heard.

22 Thank you for coming.

23 HEARING OFFICER FAY: All right, thank
24 you, Commissioner.

25 The first card I have is from a

1 Councilman. And I'm not sure from what city, but
2 it's Dagoberto Ovalle. Could you come over to the
3 microphone and please tell us who you represent.

4 COUNCILMEMBER OVALLE: Myself.

5 HEARING OFFICER FAY: But you are a
6 councilman?

7 COUNCILMEMBER OVALLE: Yes, I am.

8 HEARING OFFICER FAY: For what --

9 COUNCILMEMBER OVALLE: Here in the city
10 of Avenal.

11 HEARING OFFICER FAY: Avenal. Okay.

12 COUNCILMEMBER OVALLE: Yes. Anyway, I'd
13 just like to make a quick comment, in that getting
14 out of work, looking over the hills -- and I don't
15 know if any of you notice that you can actually
16 see the air, you know, the layers of air. It's
17 brown.

18 And although I do appreciate the fact
19 that this project would bring jobs to the area,
20 you know, we really don't need any more pollution
21 around here.

22 This ERCs from Stockton, you know, all
23 this process is new to me, although pollution is
24 not. And having that here continuously producing
25 pollutants year-round is not going to help us any

1 around here.

2 The jobs that will be produced, you
3 know, I appreciate the fact that other councilmen
4 are for this. You know, how many in the city will
5 be -- although they are talented, do they have the
6 skills to work in the power plant, you know.
7 That's my question.

8 During the wintertime we're told that we
9 can't use a fireplace because it pollutes the air;
10 it contributes to the pollution. However, a power
11 plant will be able to run during those times,
12 unless I'm wrong.

13 You know, like I said, I do appreciate
14 the fact that this project would bring jobs, but I
15 doubt that many here in Avenal will be employed.
16 The only benefit that we will be getting is the
17 pollution. The benefit that cities far from here
18 will get is the power.

19 Yes, it'll bring revenue, which is
20 needed. But at what cost? Can we afford that?

21 You know, many times we are more
22 concerned about little animals. Just look at the
23 water situation. You know, we're more concerned
24 about the fish rather than human lives, the
25 welfare of people.

1 And I see this the same way. You know,
2 are we concerned about humans rather than capital?
3 At what cost? There are other ways to generate
4 power. Maybe they'll cost a little bit more.
5 Nonetheless, we have the technology to do that.

6 And that's what I have to say, thank
7 you.

8 HEARING OFFICER FAY: Thank you. Thank
9 you for your comments.

10 PRESIDING MEMBER BYRON: Thank you for
11 coming.

12 (Applause.)

13 HEARING OFFICER FAY: What we'd like to
14 do is ask everybody, out of respect for their
15 neighbors, to limit their remarks to three
16 minutes, no more, because we do want to have a
17 chance to hear from everybody.

18 So, I'll begin calling names. I called
19 Shawn Smith earlier. Is he here?

20 MR. SMITH: Hello; my name is Shawn
21 Smith and I represent Carpenters Local 1109. We
22 cover the Tulare and Kings Counties area.

23 We're here in favor of the project
24 because the applicant has worked with us in the
25 past, and, as far as making an improvement and

1 investment in the community.

2 Five hundred jobs is what we're talking
3 about today, at least. Not just jobs, but we're
4 talking about an economic impact that will
5 continue to go forth and reinvest into our
6 community.

7 We have a lot of carpenters here that's
8 going to speak in favor of it. And we're asking
9 that you support this project.

10 I'm keeping it short.

11 HEARING OFFICER FAY: I'm just calling
12 names in the order that I received the cards. So
13 there's no particular organization to this.

14 Miguel Rodriguiz of Avenal.

15 MR. RODRIGUIZ: (Through Interpreter):
16 Good afternoon. I appreciate your attention, but
17 what I appreciate more is take into consideration
18 the damage you will create (inaudible).

19 (Inaudible) is asking for a job, he is
20 not affected here. Why? Why is he not worried
21 about the contamination from the cows. He is
22 complaining about the cows over there.

23 They will be bringing to us all the
24 trash that no one else wants, to the city of
25 Avenal. Why do they do it in a place where there

1 is 90 percent or 95 percent of Hispanics and we're
2 not given information? Why the discrimination?

3 I'd like to have the answer to that.

4 Why do we have ChemWaste in Kettleman City, the
5 Avenal landfill, so now we are going to exchange
6 lives for money. I do not agree.

7 And I think we have equal rights; and it
8 doesn't matter the race or the color. We are
9 equal. And I hope you take it that way.
10 Everybody in my family suffers from asthma, that
11 is the valley. Who has worried in here who is in
12 favor of that?

13 I'm not coming here to tell you
14 something that is not true. I am living in my
15 family. Like I said, we have been brought
16 ChemWaste, and now we are going -- so now we're
17 going to have (inaudible).

18 Who is going to assure us how the
19 contamination is not going to be combined? I
20 listened to before the contamination will land on
21 the tomatoes we eat, the lettuce we eat. We also
22 have the aqueduct and people drink from there, as
23 well.

24 Why do you say that the plant will mean
25 (inaudible)? And if it is going to be

1 constructed, why not be constructed in the
2 locations where they are now? Why not reconstruct
3 the plants where they are situated currently?

4 The amount that is going to be released,
5 and you're talking about greenhouse and all of
6 that, it's all a lie. Because everything that we
7 spray in the field is labeled. Where does all
8 that contamination end up? In the air (inaudible)
9 we put it on the plants, on tomato, on lettuce. I
10 want to know how many sprays are put on a field of
11 almonds.

12 Thank you. And I would like for you to
13 take that into consideration. I have been living
14 in Avenal for many years and I do not expect to
15 have more contamination be brought here, please.

16 HEARING OFFICER FAY: Thank you for your
17 comments. The next is Chip Ashley, who has been
18 here right along. He's with the Tehipite Chapter
19 of the Sierra Club.

20 MR. ASHLEY: Yes. My name is Chip
21 Ashley; I'm from the Tehipite Chapter of the
22 Sierra Club. Our chapter opposes this project.

23 First reason is because it's going to
24 produce GHG. Scientists agree in a strong
25 consensus that the RPS goals that we have now are

1 not enough. We need to reduce those GHG much
2 more. This plant will not help that, although it
3 may reduce the GHG. We need to move faster than
4 that. It also produces criteria pollutants which
5 will affect the local community.

6 We submit that local solar would produce
7 neither the pollutants nor the GHG. You could
8 either build solar and distribute it, solar on
9 rooftops around the local community. Or you could
10 build a local large-scale solar plant in
11 combination with some modern storage technologies
12 such as were presented at the meeting that I
13 listened to where Commissioner Byron presided, at
14 April 2nd, the IEPR, the workshop.

15 Okay, as I've said, this could be
16 supported by these modern storage technologies.
17 We have batteries; we have compressed air which
18 could act in exactly the same way as the grid-
19 supporting methods that were discussed in the MRW
20 report.

21 The solar would produce just as many
22 jobs as this plant. And it would help this
23 community in that way, just as much.

24 Thank you very much.

25 HEARING OFFICER FAY: Thank you. Next

1 is Ken Lavinder. Lavinder, L-a-v-i-n-d-e-r.

2 MR. LAVINDER: That's correct. I work
3 for Carpenters Local 1109 out of Visalia. This is
4 one of the areas we support. I'd just like to say
5 for our members that the jobs that this would
6 create much needed.

7 We got hundreds of guys out of work in
8 this area. And economically, for Avenal, this is
9 a good thing. The money it would generate, you
10 know, they have the technology in these plants to
11 know what they're doing. So just to express how
12 they feel, when you see guys out of work all the
13 time. So.

14 HEARING OFFICER FAY: Appreciate it.
15 Carolyn Shaffer.

16 MS. SHAFFER: Hi. My name is Carolyn
17 Shaffer and I work for Carpenters Local 701 out of
18 Fresno. And I'm just reiterating what Kenny says.
19 We do have a lot of members out of work who could
20 really use the work in building this plant. And I
21 just feel it would be good for all, you know. We
22 do need the energy and we do need the work.

23 Thank you.

24 HEARING OFFICER FAY: Thank you.
25 Santano Rios.

1 MR. RIOS: My name is Santano Rios and
2 I'm from Local 1109 and Local 701 out of Fresno.
3 And I agree with Carolyn, you know, if they build
4 the power plant here it's going to create work not
5 only for us, for the people in the community.

6 That's all I can say.

7 HEARING OFFICER FAY: Thank you. John
8 Moreno.

9 MR. MORENO: My name is John Moreno.
10 I'm a member of the Carpenters Local 1109, I'm a
11 working carpenter. Keep this in mind. I had an
12 opportunity to work on two previous power plants
13 in this area. We are very sensitive to the
14 environmental concerns here in building a power
15 plant.

16 As far as what, you know, there's a lot,
17 what do you call, going on this plant here. For
18 every dollar spent in this community in this
19 project it magnifies itself seven times.

20 I had an opportunity to work for Kings
21 County in the past, so I know this is an
22 economically depressed area.

23 And as far as the environmental
24 concerns, they're there all the time. I'm not
25 saying they should be put aside, though, but in

1 building this project we're very sensitive to
2 those concerns of the public, though.

3 And I'm asking you to go ahead, vote and
4 push this project through because it will be
5 beneficial for this community. This plant will
6 not solve all your problems here in Kings County
7 as far as energy is concerned. We should do some
8 of the projects like mentioned earlier, the solar
9 and everything. This is just part of the solution
10 to our energy concerns in this area.

11 So, I'm just asking you to push this
12 project along, and you know, help strengthen
13 California a little bit better economically.
14 Thank you.

15 HEARING OFFICER FAY: Appreciate it.
16 Charles Adamo.

17 MR. ADAMO: My name is Charles Adamo and
18 I represent carpenters in the area. And I'd like
19 to say that I'd like to see this project go
20 through. It's good for the economy, not only
21 local economy, but wherever the carpenters come
22 from. It will help the economy in their areas,
23 also.

24 And I'd just like to see it go through.
25 Put a lot of us to work. Thank you.

1 HEARING OFFICER FAY: Thank you, sir.
2 Tony Castillo.

3 MR. CASTILLO: Good afternoon,
4 Commissioners. I'm Tony Castillo; I'm with the
5 carpenters.

6 You know, back in the '90s I worked up
7 there at the prison, and I haven't been back to
8 Avenal since. And when I returned today, you
9 know, I seen how Avenal changed, you know, how it
10 tried.

11 I think this could happen too with the
12 tax dollars that's going to come from this power
13 plant. I think Avenal will prosper.

14 You know, I read a little bit on this
15 project. You know, this company's been doing a
16 lot of projects around the United States. And I
17 don't think it's their intent to pollute the
18 environment, you know. I think their intent is to
19 supply 450,000 homes with electricity.

20 And, you know, again, most of my fellow
21 carpenters are concerned about the work. But, you
22 know, we still got to see what the energy
23 company's trying to do to this area, and to this
24 beautiful town of Avenal.

25 Thank you.

1 HEARING OFFICER FAY: Thank you. Gloria
2 Preciado.

3 MS. PRECIADO: (Through Interpreter):
4 Hello, my name is Gloria Preciado. And I'm
5 opposed to the plant as -- Avenal because
6 everything in me -- everything creates pollution.
7 And it damages the environment.

8 We already have a lot of damages, strong
9 allergies, myself and my family, asthma, and also
10 valley fever. That even the prisoners who are
11 locked up are quarantined because they get sick.
12 And they are locked up.

13 The jobs is, there are some questions,
14 it's not just about talking. How many people from
15 here, from this community, will benefit from jobs
16 from there.

17 We've already had problems with PG&E in
18 the past. They put the chemicals in the aqueduct.
19 And the residents contracted illness that they are
20 still suffering with.

21 Also where they want to construct it,
22 it's a refuge for skunks to reproduce.

23 I hope you take that into consideration.
24 Thank you very much.

25 HEARING OFFICER FAY: Thank you.

1 Gilbert Garza.

2 MR. GARZA: Hello. My name's Gilbert
3 Garza. I'm a carpenter out of Local 1109. And I
4 can only repeat what my carpenters brothers and
5 sisters have already said.

6 We'd like to see this thing pushed
7 through, not only to keep us working, but to keep
8 the citizens of Avenal working. I mean there are
9 going to be jobs opened here through this plant, I
10 believe, that weren't open before. And if you
11 look at the economy now, you know, all the warning
12 signs, it's scary, you know.

13 And I agree, maybe there is going to be
14 a little bit of environmental damage, but, you
15 know, I'm sure the power plant's going to do
16 everything they can to keep as clean power going
17 through, you know, as much as they can.

18 That's about all I have to say. Thank
19 you.

20 HEARING OFFICER FAY: Thank you. Donna
21 Curty.

22 MS. CURTY: I'm Donna Curty and I've
23 lived in Avenal all of my life. I was born in
24 Coalinga, so I haven't strayed too far away. My
25 mother was one of those that proposed the prison

1 in this community on evening when we were sitting
2 and talking about business.

3 I've listened to all the comments being
4 made. I was very impressed at all the facts and
5 figures. I'm having trouble communicating with
6 you. I'm a teacher, but I do well with children,
7 but I don't do well with adults. I'm sorry.

8 (Laughter.)

9 MS. CURTY: I'm very impressed with
10 everything --

11 PRESIDING MEMBER BYRON: A lot of us
12 have that problem.

13 (Laughter.)

14 MS. CURTY: Thank you. I'm very
15 impressed with all of the things that I've heard,
16 the meetings and workshops that you've had before.
17 And I've done a lot of reading.

18 I am not impressed with the EPA or the
19 Sierra Club. I see that they've suppressed a lot
20 of information. They talk about global warming,
21 yet our globe is cooling off.

22 I hear about all this pollution. We've
23 got how many more people than we used to have?
24 All of the emissions. We're trying to take care
25 of things that's happening in our world.

1 I think that the energy plant is
2 something that is very necessary. I don't see any
3 pollution coming in from the dump. I hear all
4 this about the waste management business up here.
5 I talked to the people from there. I've been up
6 there. I've been in the plant and rode around
7 with the fellows in equipment.

8 I've been at Waste Management when Waste
9 Management first started out here. Those fellows
10 used to come into my restaurant years ago when I
11 had it, before I started teaching at the prison.

12 And there is no such thing as pollution
13 from those things. If it is, it's very minute,
14 very very minute. And we hear about all of this
15 that's going to happen. And all these birth
16 defects. We talk about birth defects in the area.
17 I know these people around this area; these people
18 came in with these children in this condition.
19 They weren't brought in from the area.

20 And I sit here and listen to all this
21 information coming in. It's wrong. We need this
22 energy plant, and we need it very badly.

23 Thank you.

24 HEARING OFFICER FAY: Thank you for your
25 comments. Elena, do we have any more people that

1 would like to comment?

2 PUBLIC ADVISER MILLER: I don't have any
3 others.

4 HEARING OFFICER FAY: Okay, I have no
5 other cards. Is there anybody else who's been
6 waiting to make a comment? Yes, sir. Why don't
7 you come up and give us your name.

8 MR. VITELA: I don't know what happened
9 to my card, I did submit one, though.

10 HEARING OFFICER FAY: Okay. What is
11 your name? Please spell it for us.

12 MR. VITELA: Ismael Vitela. I-s-m-a-e-l
13 Vitela, V-i-t-e-l-a.

14 HEARING OFFICER FAY: My apology.

15 MR. VITELA: I'm also a member of the
16 Visalia Carpenters Union Hall out there. And I
17 want to say briefly, too, I have worked on some of
18 the cogeneration plants that have been up and
19 coming in other places. And from my knowledge,
20 they are pretty efficient and pretty well needed.

21 I'd like to be a part of helping you
22 guys build one here, too. And I encourage this.
23 Thank you.

24 HEARING OFFICER FAY: Thank you. Elena
25 tells me that there's one other lady that

1 submitted a card who I've not called on. Please
2 come forward.

3 MS. TILLOTSON: Hi. My name's Jeannie
4 Tillotson; I've been living in the community of
5 Avenal for almost 20 years. And --

6 HEARING OFFICER FAY: Could you spell
7 your last name for us?

8 MS. TILLOTSON: T-i-l-l-o-t-s-o-n.

9 HEARING OFFICER FAY: Thank you.

10 MS. TILLOTSON: I read the pamphlets and
11 I've read the information from the previous
12 workshops and what-have-you. And I think this
13 community needs this energy plant.

14 We have potential for a lot of things in
15 this community, for the environmental issues,
16 solar and what-have-you. And I know that the
17 technology that's out there, people do not
18 intentionally build places like this to pollute
19 their environment.

20 They do it to improve the environment,
21 to bring economic growth to the communities, and
22 to bring jobs to the communities. They want the
23 communities to prosper. They don't bring them out
24 here to deaden the communities.

25 And the information on some of this

1 environmental stuff, and the mis-information
2 that's out there, all over now, people just making
3 an emotional issue and get tied up.

4 But when you read the facts and the
5 figures and the companies and the technology and
6 the science that's based behind these, this isn't
7 done blindly. It isn't done overnight. And I
8 believe that this community can use this. And I
9 hope you pass this project.

10 HEARING OFFICER FAY: Thank you very
11 much. All right. Is there anybody else who
12 wanted to make a comment who I've not called on?

13 Okay, I see no other remarks.

14 Ms. DeCarlo, can we return to Mr.
15 Anderson and he's --

16 MS. DeCARLO: Yes. He is available for
17 cross-examination.

18 HEARING OFFICER FAY: -- available for
19 cross-examination. Okay. Just a moment.

20 (Pause.)

21 HEARING OFFICER FAY: Commissioner Byron
22 correctly reminded me, just for the benefit of
23 everybody here, we made a special time for public
24 comment for you folks' convenience. We wanted you
25 to be able to come after work and know when you

1 could talk and not have to wait through a lot of
2 stuff.

3 You're absolutely welcome to listen to
4 the stuff. Where we are right now is we have an
5 expert on biology, who is a consultant to the
6 Energy Commission. And he has just testified as
7 to the potential impacts of the project on
8 biological resources.

9 And now he's available to be cross-
10 examined, questioned by the power plant company
11 and by the intervenors in the case.

12 And so now I'm going to ask Ms.
13 Luckhardt if she has any questions.

14 MS. LUCKHARDT: I have no questions.

15 HEARING OFFICER FAY: No questions,
16 okay. Mr. Simpson, you indicated that you wanted
17 to ask some questions on biological resources.

18 MR. SIMPSON: Yes, thank you. Just a
19 couple of minutes.

20 PRESIDING MEMBER BYRON: Mr. Simpson, if
21 I may. Just go a step further, Mr. Fay. Just for
22 all of you members of the public, we have a long
23 list of about 23 issues that we're going to go
24 through. Some in more detail than others.

25 We're on the fifth issue, biological

1 resources. And coming up are hazardous materials,
2 worker safety, fire protection, soil and water
3 resources, you get the idea.

4 You're more than welcome to stay. I
5 just thought I'd let you get a preview of what we
6 hope to accomplish in the next couple of hours.

7 HEARING OFFICER FAY: And if you really
8 are interested in staying and want to know what's
9 ahead, out on the table out in the lobby there is
10 one of these charts that has squares in it. We
11 jumped around just a little bit, so that we could
12 take Dr. Anderson's testimony. But we will be
13 returning to talk about public health. And then
14 the other subjects that the Commissioner
15 mentioned. So that's what's ahead.

16 There'll also be a brief dinner break
17 around 6:30, I thought. Is that right? Anytime.

18 MS. LUCKHARDT: Whenever is convenient.

19 HEARING OFFICER FAY: Okay. So there's
20 some refreshments out there in the lobby now. We
21 do that, we bring it in so that people don't have
22 to take a lot of time to drive out and find a
23 place to eat; and wait in line and all that, and
24 come back.

25 So, let's go ahead then with Mr. Rob

1 Simpson, who is an intervenor in our case. He's
2 got questions of the biological expert. Go ahead,
3 Mr. Simpson.

4 MR. SIMPSON: I just have a few
5 questions.
6 Whereupon,

7 RICHARD ANDERSON
8 was recalled as a witness herein, and having been
9 previously duly sworn, was examined and testified
10 further as follows:

11 CROSS-EXAMINATION

12 BY MR. SIMPSON:

13 Q I notice that your mitigation is based
14 on 34 acres, but it's a 148-acre parcel. Why is
15 mitigation only based on the 34 acres?

16 A It's based on the acreage that's going
17 to be disturbed directly. And it'll be fenced.
18 The rest of the site is not being affected for
19 this project. That's my understanding.

20 Q So do you know what the plan is for the
21 rest of the site?

22 A No.

23 Q So we don't know if it's additional
24 facilities or if it's --

25 A Well, my understanding is that --

1 Q -- going back to farmland or --

2 A -- it's going to continue to be
3 agriculturally -- used for agriculture. But, I
4 don't know that. The people that own the land
5 would have to answer that question.

6 Q The noise analysis, --

7 HEARING OFFICER FAY: Mr. Simpson, Mr.
8 Anderson isn't here on the noise unless it affects
9 the kit foxes' ears.

10 MR. SIMPSON: Yeah.

11 BY MR. SIMPSON:

12 Q There's a noise section in your report,
13 correct?

14 A Yes.

15 Q The 68 decibels at 500 feet, 58 at 1500
16 feet, so does the mitigation include the areas
17 that's impacted by the noise?

18 A It's taken into consideration in
19 indirect impacts. And it's dealt with essentially
20 through cumulative impacts. And direct, indirect
21 and cumulative impacts are included in the
22 mitigation package, if you understand what I mean.
23 The land that will be protected will, in effect,
24 offset the impacts.

25 Now, once the project is up and running

1 the impacts are less than during construction.

2 The most noise is during construction.

3 Q Okay. Will the noise extend past the
4 34-acre fenced area?

5 A Yes.

6 Q Is there mitigation for the noise that
7 extends past the 34-acre fenced area?

8 A Just as part of indirect impacts, or
9 temporary impacts.

10 Q For the operational noise?

11 A Yeah, not temporary, but indirect.

12 While the -- it's very difficult to quantify how
13 badly or how affected certain acres are by the
14 facility.

15 And so the best way we can handle that
16 is to agree to a mitigation ratio for the areas
17 that are disturbed, that we feel also mitigates
18 the cumulative effect.

19 It's very hard to mitigate for
20 cumulative effects. We feel the best way to do
21 that is to do a good job mitigating for direct and
22 indirect impacts. And that therefore covers
23 cumulative effects.

24 So, noise effect, light effects, human
25 activity would all be considered indirect and

1 cumulative effects. And it's essentially included
2 in the mitigation package.

3 Q So is there someplace that I can find in
4 here where it shows me that the effect of this
5 noise that extends beyond the fence is mitigated
6 somehow, or it's --

7 A Not really. You can look at the
8 cumulative study where it just talks about
9 incremental impacts of all kinds, or cumulative
10 impacts. And that the mitigation, the habitat
11 protection that's going to occur will, in part,
12 mitigate those cumulative impacts to less than
13 significance.

14 Do you have a specific species and level
15 of sound you're interested in?

16 Q Well, I'm trying to understand the
17 impact that you're showing is for the fenced area,
18 but the noise that you've identified is extending
19 beyond the fence area, which may preclude species
20 from inhabiting that area. But I don't see the
21 mitigation for that difference between the fenced
22 area and the noise-impacted area.

23 A In addition to the fenced area there's
24 some offsite disturbance, 10.2 acres. If you go
25 -- which ends up adding up to 84.3 acres or

1 something like that.

2 And all I can say is that the noise and
3 lighting and those other types of indirect impacts
4 that are very difficult to quantify, how much do
5 they affect, where, each foot out and which
6 species and when, are considered part of the
7 cumulative impacts. And the cumulative impacts
8 are mitigated with the whole package of
9 compensation.

10 Q Well, don't they usually have like
11 today's baseline, and if you're 5 decibels over
12 that or something, then that's a significant
13 impact?

14 A Well, they might do that for humans, but
15 we don't know how to do that for animals.

16 Q Okay. Is there anything about nitrogen
17 deposition in your report?

18 A No.

19 Q Okay. Could nitrogen deposition have a
20 negative effect on plant life?

21 A It can in certain situations. Depends
22 upon the soil type and the plant, if they're
23 sensitive to nitrogen. And right now I'm not
24 aware - I think that the valley is quite basic,
25 and I think a little acidity probably isn't going

1 to hurt the plants.

2 Anyhow, we're not concerned about it,
3 there's no listed species that's sensitive to
4 those types of acidic situations.

5 Q I see. So there was no nitrogen
6 deposition study?

7 A There was no study, no, --

8 Q Okay.

9 A -- because we didn't feel it was needed.

10 MR. SIMPSON: Okay, thank you.

11 HEARING OFFICER FAY: Thank you. Any
12 redirect, Ms. DeCarlo?

13 MS. DeCARLO: Yes, one question.

14 REDIRECT EXAMINATION

15 BY MS. DeCARLO:

16 Q Mr. Anderson, on page 4.2-9 of your
17 testimony, the very last paragraph, you describe
18 the impacts of the proposed project including that
19 the facilities would occupy about 34.8 acres of
20 the 148-acre parcel.

21 Does this paragraph contain the
22 identification of the impacts you anticipate to
23 occur from the project to the site?

24 A Yes.

25 Q And are you aware of anything that the

1 applicant stated otherwise that would indicate
2 that more of the 148-acre parcel might be impacted
3 than what you've already identified?

4 A No, I'm not.

5 Q And your mitigation is premised on the
6 potential impacts you've identified in this
7 portion of your analysis?

8 A Yes.

9 Q And you believe that mitigation fully
10 mitigates for any impacts --

11 A Yes, --

12 Q -- that the project may cause?

13 A Yes.

14 MS. DeCARLO: Okay, that's all.

15 HEARING OFFICER FAY: Okay. Anything
16 further within this narrow --

17 MR. SIMPSON: No, sir. No, sir.

18 HEARING OFFICER FAY: Okay, thank you.

19 All right, the other parties had not indicated an
20 interest in cross on biological resources.

21 Ms. Luckhardt, you have no direct
22 testimony on this?

23 MS. LUCKHARDT: We don't have anything
24 in direct. This can either come in by declaration
25 or we can have Mr. Stenger available for cross.

1 HEARING OFFICER FAY: Okay.

2 MS. LUCKHARDT: It's your election.

3 HEARING OFFICER FAY: Let's have you
4 introduce that on declaration. And then make your
5 witness available for very brief cross. We'll do
6 away with the summary if you don't mind.

7 MS. LUCKHARDT: Okay, no problem. Then
8 we'll just do a short Q&A just to get it set up.
9 And our witness is Joe Stenger, who has not been
10 sworn; needs to be sworn.

11 Whereupon,

12 JOSEPH STENGER
13 was called as a witness herein, and after first
14 having been duly sworn, was examined and testified
15 as follows:

16 THE REPORTER: Please state and spell
17 your name for the record.

18 THE WITNESS: Joseph Stenger,
19 J-o-s-e-p-h S-t-e-n-g-e-r.

20 DIRECT EXAMINATION

21 BY MS. LUCKHARDT:

22 Q Mr. Stenger, was a statement of your
23 qualifications attached to your testimony?

24 A Yes.

25 Q And are you sponsoring today section 6.6

1 of exhibit 1, and then all of the following
2 exhibits: 3(b), 7(b), 11 --

3 (Pause.)

4 HEARING OFFICER FAY: Do you want to
5 take a minute, Ms. Luckhardt?

6 MS. LUCKHARDT: No, that's fine.

7 BY MS. LUCKHARDT:

8 Q Have the following exhibits either been
9 prepared by you or under your direction: That
10 would be exhibit 1, 3(b), 7(b), 11, 15, 16, 17(g),
11 17(h), 19(g), 21(b) and 25(d).

12 Are you also sponsoring, though not
13 prepared by you, prepared by the Department of
14 Fish and Game, exhibit 52, exhibit 55 prepared by
15 the United States Environmental Protection Agency,
16 and exhibit 57, which is a letter from
17 Environmental Protection Agency?

18 A Yes.

19 Q Do you have any corrections to your
20 testimony at this time?

21 A No.

22 Q And insofar as your testimony contains
23 statements of facts, are those facts correct to
24 the best of your knowledge?

25 A Yes.

1 Q And insofar as your testimony contains
2 statement of opinion, do they represent your best
3 professional judgment?

4 A The opinions that are mine or prepared
5 under my direction, yes.

6 Q And do you adopt those exhibits that are
7 prepared by you or under your direction as your
8 sworn testimony?

9 A Yes.

10 MS. LUCKHARDT: The witness is available
11 for cross.

12 HEARING OFFICER FAY: Okay. Is there
13 any cross-exam of -- first, let's move --

14 MS. LUCKHARDT: At this time we would
15 like to move applicant's exhibits, which I
16 previously went through, on biological resources,
17 into the record.

18 HEARING OFFICER FAY: Is there
19 objection?

20 MS. DeCARLO: No objection from staff.

21 HEARING OFFICER FAY: I hear none.
22 Those will be entered in the record.

23 Mr. Stenger is available for cross-
24 examination.

25 Mr. Simpson, you're the only one that

1 indicated any cross. Do you have cross of Mr.
2 Stenger?

3 MR. SIMPSON: This is biological
4 resources?

5 HEARING OFFICER FAY: Yes.

6 MS. LUCKHARDT: Yes.

7 MR. SIMPSON: No.

8 HEARING OFFICER FAY: Okay. All right,
9 thank you very much. Anything further,
10 Commissioner, from you?

11 All right, that concludes our taking
12 testimony on the topic of biological resources.
13 And I want to thank both witnesses -- okay.

14 So we'd like to take about a 15-minute
15 break now. There are some snacks out there if
16 people want to have a bit to eat. Then we'll come
17 back and pick up our schedule again with public
18 health.

19 I'm sorry, Ms. DeCarlo, what --

20 MS. DeCARLO: We could address this when
21 we reconvene, but I had a recommendation --

22 HEARING OFFICER FAY: Okay, let's --

23 MS. DeCARLO: Okay.

24 HEARING OFFICER FAY: -- let's do that.

25 All right.

1 PRESIDING MEMBER BYRON: Also, there's
2 no eating in the courtroom, I'm sorry to say.

3 HEARING OFFICER FAY: No eating in the
4 courtroom.

5 Off the record.

6 Whereupon, at 6:15 p.m., the hearing was
7 adjourned, to reconvene at 6:30 p.m.,
8 this same day.)

9 --o0o--

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 EVENING SESSION

2 6:35 p.m.

3 HEARING OFFICER FAY: We're back on the
4 record now. What we'd like to do to accommodate
5 the public is before we start back on substantive
6 issues, we'll take brief public comment from
7 people that weren't here before, because we do
8 have a few more requests.

9 So, Miguel Aluniz. Is he here? Do you
10 want to come up and speak?

11 MR. ALUNIZ: (Through Interpreter): My
12 comment is that we are tired of people from
13 outside the community come in and make decisions
14 on what is best for the city. There have been a
15 lot of decisions that have been made that are
16 against the benefit of the city, overall bringing
17 contamination to the city.

18 My opinion is against the construction
19 of the power plant. Thank you.

20 HEARING OFFICER FAY: Thank you. And
21 I'm not sure if this is Maria Elena or if -- Elena
22 Aluniz? Is there another person last name Aluniz?
23 There we go.

24 MS. ALUNIZ: (Through Interpreter): Good
25 afternoon; my name is Maria Elena Aluniz. My

1 comment is about the construction of the power
2 plant.

3 And I am against it, I am against the
4 construction of the power plant. There have been
5 decisions that have been made against the city.
6 They say that it is for the benefit of the people
7 in the city, but we are the ones who are breathing
8 the contamination in the city.

9 And I am against the construction.
10 Thank you.

11 HEARING OFFICER FAY: Thank you. Julia
12 Alante.

13 MR. ALANTE: I just came to see --

14 HEARING OFFICER FAY: Okay. Pedro Mora.

15 MR. MORA: (Through Interpreter): My
16 name is Pedro Mora. I am also against the
17 planning of the power plant because in reality it
18 will not benefit any of us.

19 It is said that jobs will be created,
20 but I do not see that there is the possibility of
21 an eligible job for us because there are no people
22 that are qualified to perform those types of jobs.

23 The only thing that it will create will
24 be more pollution in our environment. Remember
25 that we are in a location where there is a lot of

1 agriculture. And we are going to damage that.

2 And we all depend on that.

3 Thank you, and we expect you to be
4 conscientious of what I am saying. The other
5 thing is that the same can be done with other
6 technology.

7 (In English) Make sense?

8 (Laughter.)

9 MR. MORA: Thank you.

10 HEARING OFFICER FAY: Thank you. I have
11 a card here from Miguel T. Rodriguez, but I think
12 he spoke already. Is he here? Yes, he spoke.
13 Yes.

14 MR. RODRIGUEZ: (inaudible).

15 HEARING OFFICER FAY: Okay, one time --

16 MR. RODRIGUEZ: (Through Interpreter):
17 I have spoken, but if you allow me a couple more
18 words?

19 HEARING OFFICER FAY: I'm sorry, we are
20 on a very tight schedule.

21 Manuel Villa.

22 MR. VILLA: (Through Interpreter): Good
23 afternoon, my name is Manuel Villa. I am also
24 against the plant because it will bring a lot of
25 pollution to the valley because we already have

1 the trash and all that. And it's not good for our
2 health.

3 I worry about the children and all that.
4 As a friend said, there's a lot of agriculture
5 here, a lot of cantaloupes, a lot of lettuce. And
6 it's not good for our health.

7 That's all, thank you.

8 HEARING OFFICER FAY: Thank you. Ray
9 Leon.

10 MR. LEON: Good afternoon. My name's
11 Ray Leon. I'm here on behalf of my familia, la
12 familia Leon, and my relatives that weren't able
13 to make it today, la familia Largas and la familia
14 Polido (phonetic), but it's, as well as other
15 relatives that are their relatives that weren't
16 able to make it today due to the fact that ag work
17 is not only very intensive, but it's something
18 that you get out late and extremely tired. And it
19 takes awhile to actually prepare yourself to be
20 presentable.

21 And my people usually, you know, they
22 prefer to take that time and rest. And it's, you
23 know, hard labor. And one of these days I invite
24 all of you to join us on one of the tomato
25 machines during 100-degree weather. And hopefully

1 there's no heat exhaustion taking place, as has
2 been here in the valley. One year I think there
3 was 11 deaths. So, there's a lot of issues here
4 in our region.

5 You know, besides this region being the
6 most polluted and contaminated region in the
7 nation, next to L.A., and I almost feel like a
8 broken record because I got to repeat this, not
9 only to the air district, you know, which they
10 know the facts, but it's important to do so. And
11 the CEC, you should know the facts of what's going
12 on in our region, right.

13 And, you know, it's really disrespectful
14 for me to learn that people from outside of this
15 community are coming in and sharing their input in
16 support of a huge source of pollution for this
17 area, when not only do they not live here, but
18 also they fail to realize that in this region, I
19 mean when we're talking about greenhouse gases,
20 that's global.

21 We know that 2 million tons of
22 greenhouse gases will be released by this power
23 plant on an annual basis, at least. Right? And I
24 think almost about 300 tons of criteria pollutants
25 will be released per year. That, first and

1 foremost, has an impact on this community, on the
2 community of Huron, on the community of Kettleman
3 City.

4 And we start talking about these
5 communities, we're talking about the same people
6 that are picking your vegetables, your salads,
7 your sandwiches to make them as cost effective as
8 they currently are. So next time you pick up a
9 sandwich think about the health and well being of
10 the people that are able to do that work, and in
11 the meantime being exploited in the process,
12 because they do not have health insurance, pension
13 plan, benefits or a living wage.

14 But these are the same individuals that
15 are out there sacrificing themselves so that you
16 can have your nice, fresh sandwich, and
17 endangering their own health for various reasons.

18 In the area of Tracy we've know of the
19 young lady, pregnant young lady working in the
20 fields. She collapsed because of heat exhaustion.
21 I mean that's one thing.

22 Another thing, the asthma rates,
23 extremely high. Fresno area, highest in the
24 nation, asthma rates. We know that ozone, which
25 is typically one of the byproducts of this power

1 plant, and it always is when it's about
2 incineration, ozone is going to be coming out of
3 this power plant and intensifying in this region.
4 Particularly in this area. At least moreso
5 particulate matter, because it doesn't travel so
6 much, but it sticks around, at least in this area,
7 PM2.5, right?

8 And all of this is extremely troubling
9 for us. Because this is about the health and well
10 being of the children here and the people. The
11 same people, on the most part, do not have health
12 insurance.

13 When an asthma attack arrives it usually
14 depends on the emergency room to take care of it.
15 And if it's a family that's already at low income
16 wage job, right, or minimum wage job, what's that
17 mean in terms of the wages for the month. Out the
18 window for that emergency room. Why? Because
19 they don't have health insurance. Because they do
20 not have the income to effectively sustain such a
21 blow. And it's a problem. And it's a reality in
22 the valley.

23 You know, one of the other things,
24 Measure of America report. It identified this
25 region, this area, specific area -- this is part

1 of congressional district 20, Jim Costa's area --
2 as the last in the congressional districts
3 nationwide in respect to least health, the lowest
4 income and least education.

5 Those are primary factors that are
6 impacting our community on a daily basis. This
7 power plant isn't going to help either one of
8 those.

9 HEARING OFFICER FAY: Mr. Leon, I mean
10 no disrespect at all. I just, I have to share
11 with you, I don't think you were here at the time,
12 I announced to your colleagues in the audience
13 that I was limiting everybody to three minutes.

14 If I let you go longer that seems unfair
15 to the others that were limited. So, could you
16 wrap it up, please.

17 MR. LEON: Yeah. As I conclude, I guess
18 I should say, this power plant isn't going to
19 provide this community anything positive. It's
20 only going to be a burden for the next 20 years,
21 the existence of the power plant, as opposed to
22 really thinking about it and making an investment,
23 especially today when we have the technology to
24 create energy, generate electricity through other
25 means, solar, photovoltaic, solar-thermal, right.

1 And a number of other ways that it could happen.

2 We know that there's a transmission line
3 that's going through here. And we know that power
4 plant's going to connect to that transmission
5 line. The same transmission line that goes to the
6 coast. So, to me it's no mystery of who the
7 energy is for.

8 And we ask that the CEC reconsider or
9 think substantively with consciousness with
10 respect to the health and well being of this
11 community and the future generations of this
12 community. My family included, and a lot of the
13 people that I grew up with.

14 HEARING OFFICER FAY: Thank you.

15 MR. LEON: Thank you.

16 HEARING OFFICER FAY: Thank you. Isidro
17 Martinez.

18 MR. MARTINEZ: No, I don't want to --

19 HEARING OFFICER FAY: No? Okay. All
20 right. Anybody else who came just to make public
21 comment that has not had an opportunity? All
22 right, I see no indication.

23 So what I'd like to do is just take a
24 moment, we'll go off the record and we'll discuss
25 with counsel how they want to put together some of

1 these topics so it can be done efficiently.

2 We're off the record.

3 MS. DeCARLO: Because the issues
4 overlap, we suggest, or we have recommended, that
5 hazardous materials management, worker safety,
6 fire protection and public health be heard all in
7 a group.

8 HEARING OFFICER FAY: Any objection from
9 the applicant?

10 MS. LUCKHARDT: No objection.

11 HEARING OFFICER FAY: Any objection from
12 the intervenors?

13 MR. SIMPSON: No, sir.

14 HEARING OFFICER FAY: I think it might
15 actually help everybody because these things are
16 not artificially separated in real life.

17 MS. DeCARLO: Right. And that way we
18 don't have to say, well, that's not in my
19 testimony.

20 HEARING OFFICER FAY: Right, right.
21 Okay. Ms. Luckhardt, you said you didn't want to
22 offer direct testimony. Do you want to introduce
23 the testimony in those areas?

24 MS. LUCKHARDT: I can introduce those
25 three areas. And what I'll do is I'll start with

1 Jim Rexroad, since he's right here. All three
2 witnesses have previously been sworn. And all
3 three of them have already indicated that a
4 statement of their qualifications are attached to
5 their testimony.

6 Mr. Rexroad is appearing, along with Joe
7 Stenger in the area of worker safety and fire
8 protection.

9 Whereupon,

10 JIM REXROAD

11 was recalled as a witness herein, and having been
12 previously duly sworn, was examined and testified
13 further as follows:

14 DIRECT EXAMINATION

15 BY MS. LUCKHARDT:

16 Q So, Mr. Rexroad, the exhibits that you
17 would be sponsoring, I will list them, would be
18 exhibit 1, section 2.3.11.5, section 6.17. In
19 addition, exhibit 7(i), exhibit 8(b), and exhibit
20 25(p). Along with a letter from the Kings County
21 Fire Department Service, which is exhibit 54, is
22 that correct?

23 A Yes.

24 Q And do you have any corrections to your
25 testimony at this time?

1 A No, I do not.

2 Q And insofar as your testimony contains
3 statement of fact, are those facts correct to the
4 best of your knowledge?

5 A Yes.

6 Q And insofar as your testimony contains
7 statement of opinion, do they represent your best
8 professional judgment?

9 A Yes.

10 Q And do you adopt all these exhibits as
11 your sworn testimony?

12 A Yes.

13 MS. LUCKHARDT: Okay, then I'm going to
14 move to Mr. Stenger. Mr. Stenger is testifying
15 both in the area of worker safety and fire
16 protection and hazardous materials. Mr. Stenger's
17 qualifications have -- he's already indicated that
18 his qualifications were attached to his testimony.
19 Whereupon,

20 JOSEPH STENGER
21 was recalled as a witness herein, and having been
22 previously duly sworn, was examined and testified
23 further as follows:

24 //

25 //

1 DIRECT EXAMINATION

2 BY MS. LUCKHARDT:

3 Q In the area of worker safety and fire
4 protection, Mr. Stenger, are you sponsoring the
5 two sections of exhibit 1, section 2.3.11.5 and
6 section 6.17, along with exhibit 7(i), exhibit
7 8(b) and exhibit 25(p) as documents that were
8 prepared by you or under your direction?

9 And in addition, exhibit 54, which is
10 from the Kings County Fire Department Service?

11 A Yes.

12 Q Thank you. And do you have any
13 corrections to your -- wait, now before I move to
14 that, also I want to move to hazardous materials.

15 In the area of hazardous materials are
16 you sponsoring applicant's exhibits, the sections
17 from exhibit 1 of 6.15, and appendix 6.15-1, along
18 with exhibit 7(b) and exhibit 25(f)?

19 A Yes.

20 Q And do you have any corrections to
21 either your worker safety or hazardous materials
22 testimony at this time?

23 A No.

24 Q And insofar as your testimony contains
25 statements of fact, are those facts true and

1 correct to the best of your knowledge?

2 A Yes.

3 Q And insofar as your testimony contains
4 statement of opinion, do they represent your best
5 professional judgment?

6 A Yes.

7 Q And do you adopt those exhibits as your
8 sworn testimony?

9 A Yes.

10 MS. LUCKHARDT: Okay, then we're going
11 to move to public health. Our witness in public
12 health is Mr. Rubenstein. Mr. Rubenstein has
13 previously testified that his qualifications are
14 attached to his testimony.
15 Whereupon,

16 GARY RUBENSTEIN
17 was recalled as a witness herein, and having been
18 previously duly sworn, was examined and testified
19 further as follows:

20 DIRECT EXAMINATION

21 BY MS. LUCKHARDT:

22 Q In the area of public health, Mr.
23 Rubenstein, are you sponsoring the following
24 sections of exhibit 1: section 6.16 and appendix
25 6.16-1, exhibit 2(b), exhibit 21(f), exhibit

1 25(i)?

2 A Yes, I am.

3 Q And do you have any corrections to your
4 testimony at this time?

5 A No, I do not.

6 Q And insofar as your testimony contains
7 statements of fact, are those facts correct to the
8 best of your knowledge?

9 A Yes, they are.

10 Q And insofar as your testimony contains
11 statement of opinion, do they represent your best
12 professional judgment?

13 A Yes, they do.

14 Q Do you adopt all of these exhibits as
15 your sworn testimony?

16 A Yes, I do.

17 MS. LUCKHARDT: Thank you. And these
18 witnesses are available for cross.

19 HEARING OFFICER FAY: Would you like to
20 move those exhibits?

21 MS. LUCKHARDT: Yes, I would, thank you.
22 I'd like to move all the exhibits which I listed
23 in the areas of public health, worker safety and
24 fire protection, and hazardous materials
25 management at this time.

1 HEARING OFFICER FAY: Any objection?

2 MS. DeCARLO: None.

3 HEARING OFFICER FAY: Okay. Those will
4 all be entered in the record at this point.

5 MS. LUCKHARDT: Oh, you know what, I've
6 had it pointed out to me that, from Mr. Stenger
7 helpfully, that I did not read the appendices that
8 go along with worker safety and fire protection.

9 So I would just like to ask Mr. Stenger
10 if his testimony on worker safety and fire
11 protection included appendix 6.17-1, 6.17-2, 6.17-
12 3 and 6.17-4.

13 MR. STENGER: Yes.

14 MS. LUCKHARDT: And did your previous
15 statements about where they contain statements of
16 facts, that those are true and correct to the best
17 of your knowledge, and where it contains statement
18 of opinion, that it represents your best
19 professional judgment, is that still correct?

20 MR. STENGER: Yes.

21 MS. LUCKHARDT: And we would also like
22 to move those additional appendices in.

23 HEARING OFFICER FAY: Any objection to
24 the additional appendices?

25 MS. DeCARLO: No.

1 MS. LUCKHARDT: Thank you.

2 HEARING OFFICER FAY: Hearing none, that
3 is received into evidence at this point.

4 The witnesses are available, are they,
5 Ms. Luckhardt?

6 MS. LUCKHARDT: They are.

7 HEARING OFFICER FAY: All right. Any
8 cross from the staff?

9 MS. DeCARLO: None from staff.

10 HEARING OFFICER FAY: Okay. So CRPE.

11 MS. BROSTROM: I want to first address
12 public health impacts. And some of these have
13 already been asked of other people, so I don't
14 know if you have -- I'll just see if you have any
15 different answers.

16 PRESIDING MEMBER BYRON: Ms. Brostrom,
17 if you'd please speak closely into the mic.

18 MS. BROSTROM: Let me first start with
19 some of the assumptions for the public health
20 analysis.

21 CROSS-EXAMINATION

22 BY MS. BROSTROM:

23 Q First, I see on the report that it's
24 reported that there's a 1-in-3 cancer rate for,
25 you know, for lifetime -- over a lifetime for an

1 individual, is that correct?

2 MS. LUCKHARDT: And when you refer to
3 the report, are you referring to the final staff
4 assessment?

5 MS. BROSTROM: The FSA, I am, thank you.

6 MS. LUCKHARDT: And do you have a
7 specific page in front of you there?

8 MS. BROSTROM: 4.7-7.

9 MS. LUCKHARDT: Thank you.

10 MR. RUBENSTEIN: That's not my number,
11 but I believe that that's reasonably accurate.

12 MS. BROSTROM: I was wondering if
13 there's been any analysis of the cancer rates in
14 this region.

15 MR. RUBENSTEIN: I have not done any.
16 I'm not sure if the Energy Commission Staff has.

17 MS. BROSTROM: Okay. Have there been
18 any analysis of asthma rates in this particular
19 area?

20 MR. RUBENSTEIN: I don't believe that
21 I've done any. But, again, the Energy Commission
22 Staff may have.

23 MS. BROSTROM: I'll ask them, as well.
24 Do you believe that existing health conditions
25 such as cancer and asthma have a relevance in this

1 particular public health assessment?

2 MR. RUBENSTEIN: No. As I indicated
3 earlier when you asked me that same question, I
4 believe that the proper approach for evaluating a
5 project's impacts are to make sure that its
6 impacts are below all acceptable health
7 significance levels, and that is true for this
8 project.

9 Those standards apply whether the
10 project's located in an urban center, in an
11 agricultural area, or in the middle of a desert
12 where there's no one around. The standards are
13 exactly the same, and significance criteria are
14 the same.

15 MS. BROSTROM: Then am I understanding
16 your correctly that you do not feel it's important
17 to look at, you know, the preexisting conditions
18 of a community in assessing public health?

19 MR. RUBENSTEIN: I didn't say that.

20 MS. BROSTROM: Okay. Would you agree
21 with that?

22 MR. RUBENSTEIN: In the general way in
23 which you stated it, I probably would agree with
24 it. In the context of a specific project I'm not
25 convinced that it has much relevance.

1 MS. BROSTROM: Okay. This is for worker
2 health and soil.

3 The project is sited on land that used
4 to be used for agriculture, is that correct?

5 MR. STENGER: Yes.

6 MS. BROSTROM: Is there potential
7 concern that the soils have been contaminated with
8 pesticides?

9 MR. STENGER: Phase ones were conducted
10 for both the site and the linear facilities. And
11 there was no indication identified that there has
12 been any concentrated use of pesticides on the
13 property as far as storage areas, mixing areas or
14 anything like that.

15 Due to the agricultural nature of the
16 site, it is certainly likely that pesticides were
17 applied in the past. The site achieved organic
18 certification a year ago next month, which means
19 that as of three years prior to that certification
20 date, or approximately four years ago, no
21 pesticides were applied, except whatever is
22 allowed under the organic farming guidelines.

23 MS. BROSTROM: Has there been any
24 testing of the soil to confirm the absence of
25 pesticides?

1 MR. STENGER: Not to my knowledge, but
2 the staff has incorporated a condition of
3 certification, a proposed condition of
4 certification, Waste-1, that would require a
5 sample of the site, soil sampling. And it would
6 require actions to be taken if there were any
7 residual pesticide concentrations of concern.

8 MS. BROSTROM: And are those conditions
9 explicitly set out in the FSA and available for
10 public review?

11 MR. STENGER: That would be just one
12 condition, Waste-1, and the answer is yes.

13 MS. BROSTROM: I mean in terms of if
14 pesticides are found --

15 MR. STENGER: Yes.

16 MS. BROSTROM: -- those mitigation
17 measures are laid out?

18 MR. STENGER: Yes.

19 MS. BROSTROM: Okay. Thank you. That's
20 it.

21 HEARING OFFICER FAY: Anything further?

22 MS. BROSTROM: No.

23 HEARING OFFICER FAY: Okay. In any of
24 these three areas?

25 MS. BROSTROM: No.

1 HEARING OFFICER FAY: Okay, thank you.

2 Mr. Simpson.

3 CROSS-EXAMINATION

4 BY MR. SIMPSON:

5 Q You mentioned that the project didn't
6 exceed any health significance levels, is that
7 correct?

8 MR. RUBENSTEIN: That's correct.

9 MR. SIMPSON: Isn't the particulate
10 matter already exceeding the health significant
11 level?

12 MR. RUBENSTEIN: Yes, the existing air
13 quality exceeds the state and federal ambient air
14 quality standards.

15 MR. SIMPSON: So then wouldn't the plant
16 also exceed the health significance levels?

17 MR. RUBENSTEIN: No. As I indicated in
18 my air quality testimony, the plant contributes to
19 a significant cumulative impact. And the
20 mitigation for that significant cumulative impact
21 is a provision of the emission reduction credits
22 consistent with both the air district requirements
23 and the CEC guidance.

24 MR. SIMPSON: I see. Are you familiar
25 with the Jacobson report?

1 MS. LUCKHARDT: I'm sorry, but the
2 Jacobson report is not in evidence.

3 MR. SIMPSON: I didn't say it was.

4 HEARING OFFICER FAY: Could you describe
5 this --

6 MS. LUCKHARDT: Well, if --

7 HEARING OFFICER FAY: -- a little better
8 before we even get into the objections. That's
9 just not an adequate description for the record.

10 MR. SIMPSON: Sure, sure. Dr. Jacobson
11 is a professor at Stanford who's done a study that
12 demonstrates that the carbon dioxide emissions
13 create a carbon dioxide dome, which creates a
14 higher health impact in the immediate area of the
15 emissions.

16 And so my question is if Mr. Rubenstein
17 is familiar with the report.

18 MR. RUBENSTEIN: And the reason I'm
19 familiar with the report is because Mr. Simpson
20 had included those two reports by Dr. Jacobson as
21 exhibit Y and exhibit C. And I reviewed those in
22 preparation for the prehearing conference.

23 MS. LUCKHARDT: And both of those were
24 excluded as evidence, so they have not --

25 HEARING OFFICER FAY: They were, but we

1 have taken them as public comment. So I think
2 it's not testimony of record, but I think he's
3 free to ask Mr. Rubenstein preliminary questions
4 about it.

5 MR. SIMPSON: Thank you. Would you like
6 to tell me your -- or would you tell me your
7 opinion of what you read in those reports.

8 MR. RUBENSTEIN: I'm sorry, could you
9 repeat the question?

10 MR. SIMPSON: Sure. You read those
11 exhibits?

12 MR. RUBENSTEIN: Yes, I did.

13 MR. SIMPSON: Based on those exhibits
14 can you tell me what you learned?

15 MS. LUCKHARDT: I'm sorry, I'm having a
16 little trouble with that question being relevant.
17 Just asking him simply what he learned --

18 MR. SIMPSON: Okay, okay, let me --

19 HEARING OFFICER FAY: Yeah, Mr. Simpson,
20 you're going to have to ask a more specific
21 question.

22 MR. SIMPSON: Let me try again.

23 If, in fact, carbon dioxide emissions
24 create a dome that increases the health impacts of
25 the immediate area, could that potentially be a

1 health impact that hasn't been studied here?

2 MS. LUCKHARDT: Are we concerned about
3 whether this project could produce such an impact?
4 Is that what the question is?

5 I'm having trouble understanding the
6 relevance. You're talking about a report that I'm
7 not even sure applies to this project, the impact
8 that you're referring to.

9 So I'm having trouble understanding
10 whether that question is truly applicable to this
11 project or not.

12 MR. SIMPSON: I see.

13 HEARING OFFICER FAY: Okay, help us out.
14 You must have in mind a way that the Jacobson
15 report relates to what you perceive as concerns
16 about this project.

17 MR. SIMPSON: Yes. I believe the
18 Jacobson report details that carbon dioxide
19 creates a dome in the area that increases the
20 pollutants in that immediate area. And that's an
21 unstudied potential health effect of this project.

22 HEARING OFFICER FAY: So what is the
23 question?

24 MR. SIMPSON: If it's correct that a
25 carbon dioxide dome is created by this project

1 that increases the health risk to the community,
2 could that be a significant effect.

3 MR. RUBENSTEIN: I can't accept the
4 hypothesis because in the first point, the paper
5 that you had, as exhibit C by Dr. Jacobson,
6 suggested that, quote, "data suggests that domes
7 of high CO2 levels form over cities." Close
8 quote.

9 And whether this project is present or
10 not, I don't think anyone could characterize this
11 area as a city with the type of urban atmosphere
12 that his analysis goes to.

13 And that even presupposes that I agree
14 with his analytical methodology, which is
15 irrelevant. But his own work only relates to
16 urban domes, CO2 domes being formed over cities,
17 not over rural areas as a result of a single power
18 plant.

19 MR. SIMPSON: Do you agree with his
20 analytical methodology?

21 MS. LUCKHARDT: I'm not sure that that's
22 relevant.

23 HEARING OFFICER FAY: Yeah, I mean --

24 MR. SIMPSON: He brought it up.

25 HEARING OFFICER FAY: -- we've already

1 established that it's not relevant to this
2 situation. Why don't you go on to some other
3 questions.

4 MR. SIMPSON: Okay. Has there been any
5 study of the effect of the pollutants impact in
6 the aqueduct from this project?

7 MS. LUCKHARDT: Is this -- go ahead.

8 MR. RUBENSTEIN: Not that I'm aware of
9 because until just now I don't believe anybody has
10 suggested the possibility that pollutants from
11 this power plant could have any impact on the
12 aqueduct, or in particular on the public health
13 issues related to the aqueduct.

14 MR. SIMPSON: I see. So the project
15 will emit acrolein?

16 MR. RUBENSTEIN: Yes, the project will
17 emit --

18 MR. SIMPSON: Arsenic?

19 MR. RUBENSTEIN: Excuse me?

20 MR. SIMPSON: Arsenic?

21 MR. RUBENSTEIN: I'd have to check. I'm
22 not sure where the arsenic would come from.

23 MR. SIMPSON: Formaldehyde?

24 MR. RUBENSTEIN: Would you like me to
25 answer the question about arsenic first?

1 MR. SIMPSON: I thought you did.

2 HEARING OFFICER FAY: He said he had to
3 check. You're going to have to wait for the
4 answer.

5 MR. SIMPSON: Oh. I thought that was
6 the answer.

7 HEARING OFFICER FAY: If you have a list
8 of things in mind, maybe you should just refer to
9 where they are in the record, rather than ask him
10 about each one. I mean if you've seen a list of
11 heavy metals, et cetera, that you're concerned
12 about, reference the record so that both Mr.
13 Rubenstein and the rest of us could know where to
14 find it.

15 (Pause.)

16 MR. RUBENSTEIN: I don't believe we
17 indicated that there were any emissions of
18 arsenic.

19 MR. SIMPSON: It looks like there's
20 reference to arsenic in public health table 1.

21 MS. LUCKHARDT: Are you referring to the
22 final staff assessment?

23 MR. SIMPSON: Yes.

24 HEARING OFFICER FAY: No, that concerns
25 applicable law.

1 MR. SIMPSON: I see.

2 So is it your contention that it won't
3 emit arsenic, or you're still checking, or --

4 MR. RUBENSTEIN: I can't find any
5 indication that we estimated any emissions of
6 arsenic.

7 MR. SIMPSON: I see. It will emit
8 nitrogen? Will there be nitrogen deposition?

9 MR. RUBENSTEIN: Those are two separate
10 questions. Are you asking whether the plant will
11 emit nitrogen?

12 MR. SIMPSON: Well, I think that's a
13 given.

14 MR. RUBENSTEIN: I just wanted to make
15 sure I understood the question.

16 MR. SIMPSON: Yeah.

17 MR. RUBENSTEIN: Yes, the plant will
18 emit nitrogen.

19 MR. SIMPSON: And so will there be
20 nitrogen deposition in the area?

21 MR. RUBENSTEIN: Nitrogen deposition
22 doesn't come from molecular nitrogen. Are you
23 referring to nitrogen deposition from nitrogen
24 containing compounds like oxides of nitrogen?

25 MR. SIMPSON: I'm talking about the

1 emissions, the heavy metals, the pollutants from
2 this plant that are going to go up and they're
3 going to come back down. And the heavier stuff is
4 going to come back down closer.

5 Has there been any study of the effects
6 of these pollutants coming down in the aqueduct
7 and in the area there?

8 MR. RUBENSTEIN: Again, I disagree with
9 the premise. The heavier stuff, as you put it, is
10 not going to come down closer. If you're talking
11 about gases such as nitric oxide or nitrogen
12 dioxide, those gases will disperse. And they come
13 down to the ground very gradually.

14 In addition, any particulate matter
15 that's emitted by this plant is of such a small
16 size that it physically behaves like a gas in the
17 atmosphere. It also does not come down very
18 quickly.

19 MR. SIMPSON: Thank you. No further
20 questions.

21 HEARING OFFICER FAY: Okay. Great.
22 That's on any of these three topics, is that
23 correct? Public health, hazmat, worker safety and
24 fire protection.

25 MR. SIMPSON: Well, the --

1 HEARING OFFICER FAY: We're presenting
2 them as --

3 MR. SIMPSON: What time period do I have
4 when we put all these together now?

5 HEARING OFFICER FAY: Well, I think
6 you've pretty much used up --

7 MR. SIMPSON: Maybe I can tell you my
8 real concern. My real concern is that --

9 HEARING OFFICER FAY: Yeah, why don't
10 you get to your real concern.

11 MR. SIMPSON: -- is that I don't see
12 myself listed in the alternative section. And I
13 would have thought that would have been the first
14 thing I would have jumped at at the prehearing
15 conference.

16 HEARING OFFICER FAY: You know, I think
17 that is because your concern about alternatives
18 was something we were hoping David Vidaver would
19 address in terms of system performance.

20 The way you articulated it, if I recall,
21 was the way the effect it had on the electrical
22 system. But we're not there --

23 MS. DeCARLO: And we do have a staff
24 witness for alternatives available for cross-
25 examination.

1 HEARING OFFICER FAY: Yes, good.

2 MR. SIMPSON: And will I be able to
3 cross-examine?

4 HEARING OFFICER FAY: Sure.

5 MR. SIMPSON: Okay.

6 HEARING OFFICER FAY: If you keep it
7 brief, yeah.

8 MR. SIMPSON: Then I'm done here.

9 HEARING OFFICER FAY: You're winning
10 brownie points by moving along.

11 Any redirect, Ms. Luckhardt? Ms.
12 Luckhardt, any redirect?

13 MS. LUCKHARDT: No redirect.

14 HEARING OFFICER FAY: Okay. So we'll
15 move to the staff panel --

16 MS. DeCARLO: I have two witnesses that
17 need to be sworn in.

18 HEARING OFFICER FAY: Please swear the
19 witnesses.

20 Whereupon,

21 OBED ODOEMELAM and ALVIN GREENBERG
22 were called as witnesses herein, and after first
23 having been duly sworn, were examined and
24 testified as follows:

25 THE REPORTER: Please state and spell

1 your names individually for the record.

2 DR. ODOEMELAM: My name is Obed
3 Odoemelam, O-b-e-d O-d-o-e-m-e-l-a-m.

4 DR. GREENBERG: Alvin Greenberg,
5 A-l-v-i-n G-r-e-e-n-b-e-r-g.

6 DIRECT EXAMINATION

7 BY MS. DeCARLO:

8 Q Dr. Odoemelam, did you prepare the
9 testimony entitled public health in the final
10 staff assessment, exhibit 200?

11 DR. ODOEMELAM: Yes, I did.

12 MS. DeCARLO: Was a statement of your
13 qualifications attached to this testimony?

14 DR. ODOEMELAM: Yes, it was.

15 MS. DeCARLO: Do the opinions contained
16 in the testimony you are sponsoring represent your
17 best professional judgment?

18 DR. ODOEMELAM: Yes.

19 MS. DeCARLO: Dr. Greenberg, did you
20 prepare the testimony titled hazardous materials
21 management in the final staff assessment, exhibit
22 200?

23 DR. GREENBERG: Yes, I did.

24 MS. DeCARLO: Did you also prepare the
25 testimony titled worker safety and fire protection

1 in the final staff assessment, exhibit 200?

2 DR. GREENBERG: Yes, I did.

3 MS. DeCARLO: Was a statement of your
4 qualifications attached to this testimony?

5 DR. GREENBERG: Yes, it was.

6 MS. DeCARLO: Do the opinions contained
7 in the testimony you are sponsoring represent your
8 best professional judgment?

9 DR. GREENBERG: Yes.

10 MS. DeCARLO: Dr. Odoemelam, can you
11 please briefly discuss your conclusions regarding
12 whether Avenal Energy would result in any
13 significant adverse impacts to public health.

14 DR. ODOEMELAM: The pollutants that we
15 assessed in this public health section are those
16 toxic air pollutants for which there are no air
17 pollutant standards.

18 In my testimony I have tried to specify
19 the methods we used to identify them, to identify
20 the health effects, and how we determined their
21 potential for significance or not.

22 And based on what we know about these
23 kinds of pollutants, and the kinds of
24 environmental pollution for pollutant control as
25 being proposed, we've determined that exposure,

1 even at the worst case levels, will not lead to
2 any adverse health effects on anybody anywhere in
3 the project area.

4 MS. DeCARLO: And what was your
5 conclusion regarding whether Avenal Energy would
6 result in a disproportionate impact to low-income
7 or minority populations?

8 DR. ODOEMELAM: As alluded to earlier in
9 the air quality section, that analysis is a two-
10 step process.

11 First we have to determine whether the
12 impacts will be significant. And if they won't be
13 significant, then the issue of disproportionate
14 impacts will not arise.

15 So, in this case, because the impacts we
16 determined will be insignificant, that the case of
17 disproportionate impacts, environmental justice,
18 will not arise.

19 MS. DeCARLO: Did you consider the
20 potential for cumulative impacts from the proposed
21 ChemWaste expansion in your analysis?

22 DR. ODOEMELAM: Yes, I did.

23 MS. DeCARLO: And did you consider the
24 potential impacts to residents of Kettleman City?

25 DR. ODOEMELAM: I did.

1 MS. DeCARLO: Concerns have been raised
2 about a birth defect and infant mortality cluster
3 current of unknown origin in Kettleman City. In
4 your expert opinion, do you believe Avenal Energy
5 has any potential to contribute to this health
6 concern?

7 DR. ODOEMELAM: No, I don't.

8 MS. DeCARLO: Dr. Greenberg, can you
9 please briefly discuss your analysis of Avenal
10 Energy's proposed use and handling of hazardous
11 materials.

12 DR. GREENBERG: Yes. The bottomline
13 there is that the proposed use of transportation,
14 storage and handling of hazardous materials would
15 be with a less than significant risk on workers or
16 the offsite public.

17 MS. DeCARLO: Concerns have been raised
18 regarding the potential of hazardous materials
19 from the project site coming into contact with the
20 aqueduct. Did you analyze this potential
21 scenario?

22 DR. GREENBERG: I analyzed it only in
23 the context of my experience in dealing with
24 offsite consequence analyses. I didn't
25 specifically address that.

1 The reason I didn't specifically address
2 it is because the offsite consequence analysis,
3 that is this is the potential of impacts offsite,
4 should there be a release of hazardous materials
5 onsite. And this offsite consequence analysis
6 focused on aqueous ammonia, which is the substance
7 that would be more -- have the greatest
8 likelihood, however remote it might be, but would
9 have the greatest likelihood of moving offsite
10 should there be a spill onsite.

11 The applicant conducted the offsite
12 consequence analysis. I reviewed and assessed the
13 results of that, and agreed with their findings.
14 In fact, I believe that their findings overstated
15 the distance that a plume of ammonia vapors would
16 travel offsite.

17 I can say this because I've conducted
18 over 50 offsite consequence analyses in my career.
19 And I have used more realistic air dispersion
20 modeling than what the applicant is forced to use
21 pursuant to the California accidental release
22 program.

23 And this more realistic modeling shows
24 that they have, indeed, overestimated the distance
25 by which ammonia vapors could travel.

1 The other substances that are --
2 hazardous materials, rather, that are found onsite
3 have lower vapor pressures. They're present in a
4 solid state so that there would not be any offsite
5 migration. And therefore, my conclusion that
6 aqueous ammonia could not get into the aqueduct
7 also applies to the other materials.

8 Furthermore, there are engineering
9 controls that would stop a liquid spill of aqueous
10 ammonia. These engineering controls include the
11 tank, itself. Well, there are two tanks. The two
12 aqueous ammonia storage tanks will be built to
13 certain very specific and very rigid
14 specificities.

15 The secondary containment system is also
16 present should there be a accidental release from
17 the primary containment system, that being the
18 tank. So the secondary containment facility would
19 also stop liquid from moving any further onsite,
20 let alone offsite.

21 MS. DeCARLO: Did you include potential
22 impacts to residents of Kettlemen City in your
23 analysis?

24 DR. GREENBERG: Yes, I did, both
25 indirectly and directly, in response to public

1 comment. And so you'll find that in the FSA.

2 MS. DeCARLO: How was the issue of
3 environmental justice considered in your analysis?

4 DR. GREENBERG: Well, again, like the
5 other subject matters, I will review the potential
6 for there to be a significant impact to any
7 receptor that could be offsite. Not just an
8 onsite worker, but a sensitive offsite receptor.

9 One of the things, also, that the
10 California Energy Commission Staff uses, is a more
11 stringent standard for what is considered to be a
12 less than significant impact. In other words,
13 where do we draw the line as what airborne
14 concentration for ammonia, for example, is
15 considered less than significant above which could
16 be potentially significant.

17 And that takes into account sensitive
18 individuals including minority populations, the
19 elderly, the ill, you know, those with preexisting
20 conditions and the very young.

21 Our standard is 75 parts per million,
22 above which further analysis is required. But
23 below which means that it would not impair any
24 individual's ability to leave the scene nor would
25 it cause any type of adverse impact.

1 That standard of 75 parts per million is
2 half the USEPA and the Cal accidental release
3 program, affectionately referred to as CalARP.
4 The CalARP program and USEPA use 150 parts per
5 million.

6 So, in that context, I do consider the
7 impact on minority populations. I do review the
8 socioeconomic information in the area, and know
9 the locations of the nearest residence, as well as
10 socioeconomic factors in the area.

11 MS. DeCARLO: Can you please briefly
12 discuss your analysis of Avenal Energy's LORS
13 compliance and potential for significant impacts
14 in the area of worker safety and fire protection.

15 DR. GREENBERG: Worker safety and fire
16 protection is essentially a LORS, laws,
17 ordinances, regulations and standards,
18 requirement. In that they have to comply with all
19 work standard regulations and codes.

20 Fire codes have to be adhered to.
21 Worker safety standards developed by CalOSHA have
22 to be followed. And we make sure, at least rather
23 I made sure in my staff analysis that the
24 applicant understands the more pertinent codes,
25 not to list every one of them in the AFC, but

1 they're bound by every single applicable worker
2 safety or fire code.

3 That they understand and have in place,
4 or I'm sorry, will put in place, should they get
5 certified, applicable worker safety training and
6 employee accident prevention during both
7 construction and operation.

8 The same holds true when it comes to
9 fire prevention. There has to be a fire
10 protection plan, prevention plan rather, in
11 construction as well as for operation.

12 MS. DeCARLO: Concerns have been raised
13 regarding the potential for soil contaminants to
14 affect workers during construction. Did you
15 analyze this?

16 DR. GREENBERG: Yes, I did. I worked
17 with staff member Casey Weaver and we jointly
18 wrote condition of certification waste-1.
19 Condition of certification waste-1 recognizes that
20 the phase one environmental health assessment did
21 not address the potential for agricultural
22 chemicals, pesticides, herbicides, fungicides,
23 rodenticides remaining in the soil, even though
24 none have been applied for at least four years.

25 It was designated a organic farming

1 operation in 2008, which means that they could not
2 have applied any agricultural chemicals three
3 years prior to that.

4 However, there is the possibility, in
5 fact it's a very realistic possibility, that
6 agricultural chemicals applied prior to that
7 period still remain in the soil.

8 So the applicant, who has not objected
9 to condition of certification waste-1, will have
10 to conduct sampling and analysis following
11 California Department of Toxic Substances guidance
12 for sampling agricultural soils. And submit that
13 sampling results to the compliance project
14 manager.

15 And then, if necessary, have to
16 remediate the soil prior to there being any type
17 of site mobilization that could possibly expose
18 workers or the offsite public to soil that
19 contains unsafe residual levels of pesticides.

20 MS. DeCARLO: Thank you. At this time
21 we'd like to move staff's testimony into evidence.

22 HEARING OFFICER FAY: Okay, and you've
23 identified the testimony --

24 MS. DeCARLO: They are section 4.7,
25 public health. These are sections of exhibit 200,

1 the final staff assessment. 4.7, public health,
2 4.4 which is hazardous materials management, and
3 4.14, worker safety and fire protection.

4 HEARING OFFICER FAY: Okay. Any
5 objection? No. We will enter that at this point
6 into the record.

7 Is the panel available for cross-
8 examination?

9 MS. DeCARLO: They are.

10 HEARING OFFICER FAY: And I would like
11 to mention, before we begin cross, that based on
12 the prehearing conference and the discussions that
13 we had, waste management and socioeconomics were
14 identified as matters of concern.

15 But I think the topics that one or both
16 of you intervenors noted, actually relate to this
17 panel. And so if you do recall what you had in
18 mind, try to focus on these folks. They clearly
19 address socioeconomic analysis in terms of
20 potential impacts on sensitive populations. And
21 they've also discussed waste management.

22 I just don't want you to feel like, when
23 we get to the end, and those subjects are taken on
24 declaration and there's no cross, that you didn't
25 have a chance. Now is the time to ask those

1 questions that relate to waste management,
2 socioeconomics in terms of health impacts.

3 So, any cross-examination from the
4 applicant?

5 MS. LUCKHARDT: No.

6 HEARING OFFICER FAY: All right. CRPE,
7 do you have --

8 MS. BROSTROM: Thank you.

9 CROSS-EXAMINATION

10 BY MS. BROSTROM:

11 Q I'd like to talk about preexisting
12 conditions -- so, let me phrase it in a question.
13 Would it make a difference to your analysis if it
14 was proven that the birth defect cluster was
15 caused by environmental pollution?

16 DR. GREENBERG: Who are you addressing
17 that to?

18 MS. BROSTROM: Public health or
19 hazardous waste, either one or both.

20 DR. ODOEMELAM: It would make a
21 difference obviously.

22 MS. BROSTROM: And how so?

23 DR. ODOEMELAM: Well, if it is proven
24 that specific environmental results are
25 responsible for clusters, well, not only would the

1 Department of Health Services be studying that,
2 but the staff will worry about adding anything
3 that we know is capable of adding to those kinds
4 of effects.

5 MS. BROSTROM: Okay. Did you, for your
6 public health analysis, consider the birth defect
7 cluster in Kettleman?

8 DR. ODOEMELAM: Yes, we did. We've
9 dealt with many cluster -- issues of clusters in
10 several other areas before.

11 MS. BROSTROM: In terms of your
12 assumptions for this particular project, then, did
13 you assume that the cluster was not caused by
14 environmental pollution?

15 DR. ODOEMELAM: No. It's very
16 difficult, one thing, to assign any such clusters
17 to any environmental insult. And in this case
18 nothing from this facility has been shown as
19 (inaudible) capable of those kinds of impacts.
20 Nothing from this facility. No kind of pollutant
21 that we know of, that we're aware of.

22 MS. BROSTROM: All right. Of course,
23 our concern is cumulative impacts with existing
24 sources of pollution and how those may interact.
25 And so I guess our concern is if it was shown that

1 toxic air pollution from ChemWaste caused these
2 impacts, how would that change your analysis?

3 DR. ODOEMELAM: Very difficult to show
4 that. But if that would be shown, of course, we
5 will be concerned about adding any more to it.
6 That's why our concern is the significance of the
7 increment from the facility.

8 MS. BROSTROM: And if it's shown that
9 exposure to hazardous waste were causing the birth
10 defect clusters, how would that change your
11 analysis?

12 DR. GREENBERG: Insofar as hazardous
13 waste on the site, if you're referring to the
14 potential for agricultural chemicals on the site,
15 but I think maybe you're asking about hazardous
16 materials. You know the difference, a hazardous
17 material is a chemical that they're using, and
18 when it hits the ground it's now a hazardous
19 waste.

20 And so the hazardous materials that
21 they're using would not change my opinion. And
22 that's really due to the great distance between
23 the proposed location of the Avenal Power Plant
24 and Kettleman City or the chemical waste
25 management facility.

1 So, just assuming hypothetically that
2 there is a birth defects cluster that was shown to
3 be impacted by chemicals at the ChemWaste
4 hazardous waste landfill, it would not change my
5 opinion. Because the airborne concentration of
6 either hazardous materials that could be released
7 during an accidental release, or even agricultural
8 chemicals in the soil that still remain there,
9 that get disturbed by ground, movement on the
10 ground, would be so low even just a couple hundred
11 feet or a hundred or two yards away, that you
12 wouldn't even be able to measure it a mile away;
13 let alone five, six or seven miles away. So there
14 would be no potential for cumulative impact.

15 A toxicologist looks at the dose; the
16 basic tenet of toxicology is dose response. The
17 stronger, you know, the more the dose the stronger
18 the response.

19 And so it has to be a completed exposure
20 pathway. And then it has to be a certain amount.
21 If it's one or two molecules there's going to be
22 no impact at all. And that's about what you have
23 from a hazardous materials release at this
24 facility by the time it got to Kettleman City. If
25 you could even calculate it, it would be just a

1 few molecules.

2 MS. BROSTROM: So I guess what I'm
3 hearing, combined, is perhaps airborne toxic
4 pollution may have an impact, but the hazardous
5 materials stored onsite that would be emitted on
6 the ground or something, would not pose a
7 potential impact no matter how the birth defect
8 cluster was caused, is that correct?

9 DR. GREENBERG: Well, I think you have
10 to understand, also, that what I'm addressing is a
11 hazardous materials release. I know it sounds a
12 little compartmentalized here, but it can be
13 airborne, because ammonia will become a vapor.

14 This is aqueous ammonia and the ammonia
15 vapor will come off from the water and go in the
16 air.

17 My colleague is addressing public health
18 impacts from that which comes out of the stack,
19 from burning natural gas.

20 MS. BROSTROM: Okay. All right, thank
21 you. Does your analysis or does any analysis
22 factor in the transportation of these hazardous
23 materials to the site?

24 DR. GREENBERG: Yes. In my section on
25 hazardous materials management it talks about

1 transportation and existing databases of risk, as
2 well as public risk assessments.

3 MS. BROSTROM: How was the risk of
4 spills assessed in terms of transporting these
5 hazardous materials closer to communities?

6 DR. GREENBERG: Well, I'm not sure I
7 understand your question. But let me see if I can
8 explain to you how I assess the risk of a
9 transportation of a hazardous material. See if it
10 answers your question.

11 We do look -- I do look at the
12 transportation route from a major interstate
13 highway. In this case it would be I-5. And I
14 would not want that route to go by a school, a
15 hospital, even a park, a daycare center, anything
16 that would, any structure or building that would
17 have a concentration of what we term sensitive
18 receptors. Sensitive receptors are essentially
19 those individuals that have a great
20 susceptibility. So I would look at that.

21 And we have, on occasion, told an
22 applicant you can't use that route, you have to
23 use another route.

24 Does that help?

25 MS. BROSTROM: Well, now it leads me to

1 another question. Because of the birth defect
2 cluster wouldn't that classify residents of
3 Kettleman City as sensitive receptors?

4 DR. GREENBERG: Well, we're all
5 sensitive in a certain way. The definition that
6 the California Energy Commission uses as a
7 sensitive receptor is a concentration of sensitive
8 individuals.

9 There can be a sensitive receptor in a
10 home, someone who is elderly, someone who has just
11 been born, or someone with a preexisting medical
12 condition, but we don't call a residence a
13 sensitive receptor.

14 But I would like to also, if I may,
15 comment on this cluster that you feel exists. And
16 if you recall from my statements at the FSA staff
17 workshop, as health professionals we're both
18 concerned if there is any cluster of a disease in
19 an area.

20 However, it is beyond the California
21 Energy Commission's authority, as well as
22 resources, to investigate whether it's truly
23 there.

24 Now, one thing I do know, if we assume
25 that it's there, there are teratogens, it's very

1 difficult to determine the cause. Yet, the
2 scientific and medical literature, to at least a
3 reasonable scientific certainty, points to several
4 factors, but none of those factors include the
5 contaminants that come from a natural gas-fired
6 power plant.

7 And none of those factors would include
8 those chemicals, even at the concentrations that
9 our air dispersion modeling would predict would
10 exist in Kettleman City. Whether it be a
11 hazardous materials released, or whether it be the
12 toxic air contaminants that come from the stack.

13 Now, I could go over with you what the
14 Mayo Clinic feels is some of the major causes of
15 that type of birth defect. But suffice it to say,
16 these chemicals are not on their list.

17 MS. BROSTROM: Okay. I'm wondering
18 whether, or how did -- I guess this is going to be
19 a question for -- let's do it, toxic air
20 contaminants.

21 How did you assess wind patterns in
22 determining whether or not there's a potential
23 impact?

24 DR. ODOEMELAM: I think the analysis
25 shows that -- describing in testimony that you do

1 modeling, in which you conduct wind patterns and
2 weather pattern over a year so you can not only
3 assess the emissions released from the facility,
4 but also dispersion. So we do that for modeling
5 over weather information that's characteristic of
6 an area.

7 So, from there, we determine exposure
8 levels. And then those exposure levels will
9 compare with what we'll call referential exposure
10 levels that are a level that -- for health
11 effects. So that's how we determine whether the
12 exposure level that are capable of health impacts
13 or not.

14 MS. BROSTROM: And this is for the soil
15 contamination:

16 DR. GREENBERG: For hazardous materials
17 release.

18 MS. BROSTROM: Yeah, for soils.

19 DR. GREENBERG: Oh, for -- we don't
20 consider that. We did not conduct an analysis of
21 the potential for wind to move some of the soil.

22 MS. BROSTROM: Moving on from wind to
23 this question about pesticides and soil.

24 DR. GREENBERG: Oh, I'm sorry. I
25 thought you were continuing.

1 MS. BROSTROM: No. Have you taken into
2 account drift from other agricultural areas that
3 may be nearby and how that may contaminate the
4 soils there?

5 DR. GREENBERG: Well, if it has
6 contaminated the soil, it will be found in what we
7 call a phase two environmental site assessment,
8 the sampling and analysis that the applicant will
9 have to do.

10 In other words, it won't matter whether
11 it came from direct application to that particular
12 site, or drifted to that site.

13 MS. BROSTROM: But, I mean, is there a
14 continuing possibility of drift? Are there
15 continuing monitoring of the soils and the worker
16 safety, because it is an agriculture region?

17 DR. GREENBERG: Soil on the site, or
18 soil offsite?

19 MS. BROSTROM: Soil where workers --
20 well, where workers could be working. Is there
21 any -- has the possibility of drift from other
22 nearby agriculture areas been considered?

23 DR. GREENBERG: No, it has not been.

24 MS. BROSTROM: The other thing, there is
25 no separate section for the environmental justice

1 section. So I don't know that you're the
2 appropriate people to ask about EJ issues.

3 I was told at the workshop that the EJ
4 analysis was done, you know, section by section.
5 And in looking through the report more thoroughly
6 it appears that only several sections actually
7 looked at environmental justice impacts.

8 And I don't think I saw it in the
9 hazardous materials site. I didn't see it in the
10 water, sections like that. Did each section look
11 at EJ impacts?

12 DR. GREENBERG: Well, I can't testify
13 for what other sections did. I'd leave that to
14 the project manager. It's not specifically
15 spelled out in hazardous materials, but I was
16 asked -- but I look at that anyway. It's
17 incorporated in my basic analysis.

18 And if I had found something I sure
19 would have let staff counsel and staff project
20 manager know immediately.

21 MS. BROSTROM: All right. Several
22 people have said that there's two prongs to an EJ
23 assessment. You know, first, whether there's a
24 impact. And the second prong has not been met
25 because, you know, didn't satisfy the first prong.

1 I'm just wondering, if the
2 decisionmakers don't agree with staff's
3 conclusions about potential impacts here, what
4 would the second -- has there been any analysis of
5 the second prong, whether or not there's a
6 disparate impact?

7 HEARING OFFICER FAY: Let me interject
8 here. It seems to me that if there's an impact
9 and that first test is met, then -- and I believe
10 the evidence in this case shows that there is a
11 high minority and/or low-income population.

12 So my understanding is staff would
13 assume a disparate impact under those
14 circumstances. Isn't that right?

15 MS. DeCARLO: If there was a significant
16 impact? I believe the general analysis is first
17 we identify significant impact. And only then, if
18 there is a significant impact, do we look to see
19 if it's disproportionate among --

20 HEARING OFFICER FAY: But if the
21 demographics are disproportionate, or with a high
22 percentage of minority, for instance, wouldn't
23 that automatically mean that a significant impact
24 is being applied to this population, creating a
25 disproportionate impact?

1 DR. GREENBERG: No, Hearing Officer Fay,
2 not in my experience in writing and reviewing
3 environmental justice. If you have a less than
4 significant impact the analysis stops right there.

5 In other words, you don't look and see
6 whether your minority population has a greater or
7 less than significant impact. If everybody is
8 below that line of significance, then it stops
9 there.

10 That was first adjudicated in the
11 year --

12 HEARING OFFICER FAY: But the question
13 is, if it is significant.

14 DR. GREENBERG: Oh, if it is
15 significant, oh, then, we would definitely go and
16 look at the --

17 HEARING OFFICER FAY: Because if it is
18 found to be significant, and you know, as you know
19 in this record, that there's a disproportionately
20 high percentage of minorities, wouldn't there be a
21 certain presumption of a disproportionate impact?

22 DR. ODOEMELAM: If it was significant,
23 yes, we'd really go nuts.

24 HEARING OFFICER FAY: All right. All
25 right. I just wanted to clarify that.

1 MS. BROSTROM: Thank you, that answered
2 my question.

3 And finally, just real quick, the last
4 line is, again this is on EJ. I've heard that the
5 CEC has an environmental justice protocol, is this
6 correct? Or a policy?

7 MS. DeCARLO: I think that goes to a
8 policy, general policy question, and not a
9 specific technical area.

10 MS. BROSTROM: Well, I was informed by
11 the EPA that the CEC had its own protocols.

12 DR. ODOEMELAM: I can tell you that in
13 the past, actually the Commission was one of the
14 first agencies to have an EJ workshop. I don't
15 know if you were there then, that was about ten
16 years ago.

17 We used to have each section, the
18 socioeconomics section, look at the socioeconomics
19 to see the potential for population distribution.

20 What has happened now is this case for
21 significant has taken over. So unless the impacts
22 are significant we don't go beyond that. Although
23 we can still characterize the area in terms of
24 demographics and so on.

25 MS. BROSTROM: So there was no specific

1 protocol that CEC used to use, that was not used
2 for this project?

3 DR. ODOEMELAM: We did have an analysis
4 in the past, a section, characterized the area in
5 terms of minority and poverty and so on. But,
6 again, as I said, we have to come to the driving
7 fact of significance. If there's no significance,
8 if there's nothing happening then we can just
9 characterize the area, and you know, the analysis
10 stops there.

11 Then each side can make its own
12 conclusions, saying that there was -- populations
13 were characterized. It might point to potential
14 for EJ issues, but that the impacts were
15 insignificant that that EJ issue does not come up.

16 MS. BROSTROM: Okay. So a copy of these
17 protocols that were not used would therefore not
18 be a part of the record, is that correct?

19 DR. ODOEMELAM: Copy of this protocol?
20 No.

21 MS. BROSTROM: Yes, --

22 DR. ODOEMELAM: It would just --

23 HEARING OFFICER FAY: I need to clarify
24 something. My understanding is that whatever
25 protocol you were referring to of it is sort of

1 ancient history.

2 It's been quite awhile since that was
3 used. And it's not a change in the case of the
4 Avenal analysis. It was a change years ago. And
5 that now the significant/nonsignificant threshold
6 is what it's focused on.

7 MS. BROSTROM: Okay, thank you. I think
8 that's all I have, thank you.

9 HEARING OFFICER FAY: Okay. Thank you.

10 All right, Mr. Simpson, will you please
11 keep in mind my reference to those other areas
12 that I believe you have an opportunity now to ask
13 about. But, we have before us the testimony of
14 public health, hazmat and worker safety by the
15 staff.

16 MR. SIMPSON: Thanks, I won't be long.

17 CROSS-EXAMINATION

18 BY MR. SIMPSON:

19 Q FSA page 4.7-11, there's a table there
20 that shows this list of -- public health table 1,
21 types of health impacts and exposure contributive
22 toxic emissions.

23 Are these the toxic emissions from this
24 facility?

25 DR. ODOEMELAM: No. When he was saying

1 this earlier, a little confused. This is
2 examples.

3 MR. SIMPSON: I see. And where are the
4 toxic emissions for this facility listed?

5 DR. ODOEMELAM: They are in the modeling
6 that the applicant does, and we have it in our
7 disk. And Avenal has examples for specific
8 projects.

9 The ones for which risks are given are
10 listed to us by the applicant who identified them
11 and who analyzed them, in the AFC.

12 MR. SIMPSON: I see.

13 DR. ODOEMELAM: And also in the results.

14 MR. SIMPSON: So can you tell me which,
15 on this list, this facility emits?

16 DR. GREENBERG: Yeah. Typically from a
17 gas turbine, and we'd let the applicant, of
18 course, verify this because it's their AFC, but
19 typically there'd be acetaldehyde, acrolein; there
20 would be ammonia; there would be benzene; there'd
21 be 1,3-butadiene; ethylbenzene, formaldehyde and
22 polypropylene, propylene oxide, toluene and
23 xylene.

24 The metals would come from a cooling
25 tower which this facility does not have. And you

1 would get some PAHs, polycyclicaromatic,
2 hydrocarbons from the diesel generator.

3 MR. SIMPSON: Was chromium in there?

4 DR. GREENBERG: You would get chromium
5 from a wet cooling tower.

6 MR. SIMPSON: I see.

7 DR. GREENBERG: Not from a natural gas
8 turbine.

9 MR. SIMPSON: So the public health
10 section here doesn't have the amounts of these
11 emissions? It would be in the AFC? How much of
12 these emissions are coming out is not in here?

13 DR. ODOEMELAM: Well, they will be in
14 the files that identify each pollutant that was
15 assessed, the levels, the kinds, the ones that
16 (inaudible) the greenhouse. The applicant gives
17 us the file of all the listings.

18 MR. SIMPSON: Okay, but it's not in
19 your --

20 DR. ODOEMELAM: No, we do not include
21 them in testimony.

22 MR. SIMPSON: I see.

23 DR. ODOEMELAM: We included the results
24 in the summaries.

25 MR. SIMPSON: On the next page, the

1 second or third paragraph, it says: Assess the
2 population the project site, six-mile radius,
3 consists of only a few scattered farmhouses.
4 There would be no environmental justice concerns
5 related to minority or poverty status."

6 So, inversely, if it was a highly
7 populated area, would there be potential for
8 environmental justice concerns?

9 DR. ODOEMELAM: Well, you have to
10 remember the reason for this environmental justice
11 issue in the beginning. It was just to show that
12 there was no attempt to site facilities in areas
13 of relatively poor incomes, of minorities. So
14 there has to be that kind of distribution to talk
15 of disproportionate impacts.

16 MR. SIMPSON: Okay. So this says, since
17 the project there's only a few scattered
18 farmhouses there, there's no environmental justice
19 concerns. So is that also telling me if it was a
20 highly populated area there could be environmental
21 justice concerns?

22 DR. ODOEMELAM: Yes, if it's a highly
23 populated area, which we'd see from the
24 demographics. The census tracts with people with
25 lower income levels and areas where people are

1 minority types. Yeah, you can see that. And you
2 would -- to check in to see.

3 Now, is there any attempt to look at
4 such a pollutant in an area with poor people,
5 minorities. That is essentially what
6 environmental justice issue is intended to
7 address.

8 MR. SIMPSON: So, would sensitive
9 receptors, as you put people, have the same
10 potential impact as not so sensitive receptors?

11 DR. ODOEMELAM: No, your concept of
12 sensitive receptor is different from the concept
13 of environmental justice.

14 Sensitive receptors, as Dr. Greenberg
15 tried to explain earlier, initially at the
16 Commission we use that for locations with
17 sensitive people, like schools, churches and so
18 on.

19 What we used that for was in case of a
20 project that is proposed for an area with schools,
21 hospitals, everything else being equal, compare
22 with an alternative without schools and hospitals,
23 where you have people who are sensitive, people
24 who are ill and more sensitive to impacts of the
25 environmental pollutants, in general.

1 Then staff would recommend that the
2 facility be sited in an area without those
3 sensitive receptors.

4 MR. SIMPSON: So am I hearing that there
5 could be a different threshold of significance for
6 sensitive receptors?

7 DR. ODOEMELAM: No. A sensitive
8 receptor, again, there are two of them. In this
9 case, we're talking of a place with many people
10 who are sensitive to environmental pollutants.
11 That's why we ask each applicant to identify
12 schools, hospitals, because they have people who
13 are more sensitive.

14 MR. SIMPSON: I understand. So, but
15 you're saying there's not a different criteria?
16 There's not a different significance level?

17 DR. ODOEMELAM: No, the significance
18 level for all health effects are the same, because
19 the reference exposure levels are established to
20 take into account receptive factors, people who
21 are more sensitive to the environmental pollutants
22 than a regular individual.

23 That's why the standards that are set
24 will protect those with asthma, because they are
25 more sensitive, so there are certainty factors

1 that apply to measure that. Even they are
2 protected when they exposed.

3 MR. SIMPSON: So if what I'm hearing is
4 that the threshold for sensitive receptors is not
5 different, then why would you consider whether or
6 not there are sensitive receptors?

7 DR. ODOEMELAM: Okay. The sensitive
8 receptor issue comes before the Commission in
9 trying to site a power plant.

10 MR. SIMPSON: I see.

11 DR. ODOEMELAM: There's an area with
12 many locations with sensitive receptors.
13 Everything else being equal, there's an area with
14 many schools, hospitals and so on. And there's an
15 area that doesn't have those.

16 For that narrow concept we will
17 recommend that you site -- that you consider,
18 anyway, an area without many sensitive receptors.
19 Because those sensitive receptors, or those
20 sensitive individuals are more sensitive to the
21 effects of environmental pollutants than the
22 ordinary person.

23 So those are two different concepts.

24 MR. SIMPSON: I see, so sensitive
25 receptors would be like elderly, children?

1 HEARING OFFICER FAY: No, that's been
2 identified previously.

3 MR. SIMPSON: Okay.

4 HEARING OFFICER FAY: And he's answered
5 this question several times.

6 MR. SIMPSON: And what about minority
7 population without healthcare, would they be
8 sensitive receptors?

9 DR. ODOEMELAM: Well, being a minority
10 doesn't make a necessary sensitive. You get into
11 the matter of healthy -- if you have preexisting
12 conditions, whether you're a minority or not,
13 you're a sensitive receptor.

14 MR. SIMPSON: Okay. Does the minority
15 population here have higher health incidents than
16 nonminority population here?

17 DR. ODOEMELAM: We don't know.

18 MR. SIMPSON: I see.

19 DR. ODOEMELAM: Being a minority doesn't
20 necessarily make you that.

21 MR. SIMPSON: I see.

22 DR. GREENBERG: Mr. Simpson, just for
23 purposes of elucidation, the health standards that
24 we use are set by CalEPA, the Office of
25 Environmental Health Hazardous Assessment. These

1 are toxicologists, physicians and epidemiologists,
2 who do take into account susceptible populations.

3 In other words, if it's a minority
4 population that has preexisting illnesses, they do
5 take that into account.

6 Now, using the best scientific
7 information and medical information available,
8 they set the standards. It's either a cancer
9 potency slope for a carcinogen, or it's an REL,
10 reference exposure level, for noncancer health
11 effects, such as impacts on the respiratory system
12 or birth defects, et cetera.

13 So, yes, the answer to your question is
14 yes. Not by the Energy Commission, because we
15 don't set those standards. But we use those
16 standards set by our sister agency.

17 MR. SIMPSON: So, at the bottom -- thank
18 you. At the bottom of the same paragraph, it says
19 it will also be an insignificant health risk to
20 any farmworkers whose exposure would occur only
21 during working hours in the field.

22 Do we know how many farmworkers are
23 within six miles radius? Was there any study?

24 DR. ODOEMELAM: Unless you assume that
25 each farmworker is sensitive. It doesn't

1 necessarily have to be. The issue is if you are
2 sensitive you have preexisting conditions. We are
3 worried about you, we are more concerned about you
4 being exposed. As Alvin said, the standards are
5 set to protect you.

6 MR. SIMPSON: I see. I'm told there's
7 15,000 farmworkers within six miles of the
8 facility. And they probably spend more time in
9 the field than people who live in the farmhouses
10 spend in the farmhouses.

11 So it would seem that there would be a
12 higher impact on people working in the field than
13 people living in a house.

14 DR. ODOEMELAM: You know that the
15 Department of Food and Agriculture has specific
16 methods or requirements for using each pesticide,
17 so they are regulated. So we are dealing with
18 something different now, not necessarily what
19 staff will consider in that case.

20 All we can say is that, of course, we
21 want to know what an area is like, what is the
22 population distribution. Does the area have many
23 minorities and is that a reason for trying to site
24 a power plant there. That is what environmental
25 justice analysis for this is.

1 MR. SIMPSON: So I think I have just two
2 more questions. This ammonia, if it releases,
3 does it release as a liquid or release as a gas?

4 DR. GREENBERG: Well, in this case it
5 would be both, sir. It would be first released as
6 a liquid, because it does exist in a liquid form.
7 Certainly there's some air space within the
8 aqueous ammonia storage tanks. And so there's an
9 equilibrium depending on temperature and pressure
10 between ammonia and it being ammonia hydroxide.
11 In other words, ammonia gas or ammonia vapor, is
12 very soluble in water. So it's trucked here as a
13 liquid. There's a little bit of air space as a
14 gas.

15 And, of course, when it's released it's
16 going to be released as a liquid, in an accidental
17 release format.

18 And then there'll be a vapor coming off
19 of it. And the concentration of the vapor will be
20 determined by many factors, not the least of which
21 is temperature, wind speed and the surface area is
22 a very big factor, too. How big this pool is.

23 So if you limit the pool, which the
24 applicant is proposing to do, with not only one
25 type of engineering control, but actually a second

1 engineering control -- it's really state of the
2 art, they're incorporating both engineering
3 controls to limit their surface area. And we
4 usually require only one way of limiting the
5 surface area. So it will come up then as a vapor.

6 MR. SIMPSON: And so I understand you're
7 protected for accidental spills. What if somebody
8 intentionally dumped it in the aqueduct?

9 DR. GREENBERG: Okay, well, that brings
10 up a very interesting point. Within the hazardous
11 materials section, I'm also responsible for site
12 security.

13 Despite the fact that this facility
14 would not fall under the U.S. Department of
15 Homeland Security, CFAT standard, that's chemical
16 facility antiterrorism standard, it does fall
17 under our purview. And we do have minimum
18 requirements that this facility will have to
19 follow. They can always put in more that would
20 maintain the site security.

21 And we can either go on trusting those
22 standards that we have, or we can go on our real-
23 life experience, which we've not had a break-in
24 where somebody has released aqueous ammonia or
25 even anhydrous ammonia, for that matter, which

1 this facility is not proposing to use at all, such
2 that it would leak into either a containment area
3 or into an area that could then move offsite.

4 So, what you're asking me is a question
5 of what would happen if. And that if is not
6 plausible. The risk of that happening is so low,
7 it hasn't happened in the CEC's existence.

8 MR. SIMPSON: Okay. But if it did, if
9 it dumped into the aqueduct, what could the
10 potential effect be?

11 DR. GREENBERG: Probably very little.
12 It depends on what the amount is. The aqueduct
13 contains an incredible volume of water moving, I
14 believe, three to five miles per hour. There's an
15 incredible amount of cubic feet per second of
16 water moving there. And it would just be diluted.

17 It depends on how much somebody was able
18 to dump in there.

19 MR. SIMPSON: Okay. Thank you. My last
20 question. Could an environmental justice
21 community also be sensitive receptors?

22 DR. ODOEMELAM: Yes, conceptually.

23 MR. SIMPSON: Thank you.

24 HEARING OFFICER FAY: Any redirect, Ms.
25 DeCarlo?

1 MS. DeCARLO: Yeah, just a few
2 questions.

3 REDIRECT EXAMINATION

4 BY MS. DeCARLO:

5 Q Dr. Odoemelam, I just want to make sure
6 the record is clear with regard to your testimony.
7 Is it your testimony that regardless of what the
8 cause of these cluster impacts in Kettleman City
9 end up being, Avenal could not contribute to those
10 impacts?

11 DR. ODOEMELAM: Yes, that's my
12 conclusion.

13 MS. DeCARLO: And with regard to your
14 analysis of public health, is your inclusion of
15 sensitive receptors in the analysis, would that
16 automatically cover any health concerns that might
17 be present in a low-income or minority population?

18 DR. ODOEMELAM: Yes.

19 MS. DeCARLO: Okay, that's all.

20 HEARING OFFICER FAY: Okay, any further
21 recross on these two narrow questions?

22 MS. BROSTROM: Yeah.

23 RECROSS-EXAMINATION

24 BY MS. BROSTROM:

25 Q I'm just confused about your answer to

1 the first question. In response to my question
2 about, you know, if it was determined later that
3 toxic air pollution had impacts on this birth
4 defect cluster, you stated that it would change
5 the analysis for the Avenal project.

6 DR. ODOEMELAM: First of all, that would
7 be big news, because there are very few places in
8 which clusters, teratogens, there are very few
9 that I know of. So if that associative is made,
10 that would be big news. And we will do a lot more
11 than just analyze it.

12 MS. BROSTROM: Right. But that was your
13 testimony to me earlier?

14 DR. ODOEMELAM: Yes.

15 MS. BROSTROM: All right, thank you.

16 MS. DeCARLO: If I could do redirect.

17 HEARING OFFICER FAY: Do you really want
18 to go again?

19 MS. DeCARLO: I just want to make sure
20 the record is clear.

21 HEARING OFFICER FAY: All right.

22 FURTHER REDIRECT EXAMINATION

23 BY MS. DeCARLO:

24 Q Your testimony ultimately, though, Dr.
25 Odoemelam, is that Avenal Energy does not produce

1 any teratogens that could contribute to a cluster
2 impact in Kettleman City?

3 DR. ODOEMELAM: That is my testimony.

4 HEARING OFFICER FAY: Okay. All right.

5 So that concludes the testimony of public health,
6 hazmat and worker safety.

7 Let's go off the record for a moment.

8 (Off the record.)

9 MR. SIMPSON: We're off the record?

10 HEARING OFFICER FAY: No, we're on the
11 record now.

12 MR. SIMPSON: Oh, I'm sorry.

13 HEARING OFFICER FAY: And we are moving
14 to the topic of alternatives. The applicant has a
15 panel.

16 MS. LUCKHARDT: I'm still getting there.

17 (Pause.)

18 MR. SIMPSON: I will have to leave
19 shortly. I don't know if I can participate by
20 telephone tomorrow?

21 HEARING OFFICER FAY: Let's go off the
22 record.

23 (Off the record.)

24 HEARING OFFICER FAY: We had a
25 conversation off the record where both Mr. Simpson

1 and CRPE have identified the fact that they have
2 no questions of the applicant on either soil and
3 water or alternatives. And none of the other
4 remaining topic areas are identified as having any
5 cross-examination. They're coming in on
6 declaration.

7 What we're going to do is go directly to
8 the staff presentation on alternatives, and we'll
9 come back to the applicant later.

10 Go ahead, Ms. DeCarlo.

11 MS. DeCARLO: We have a staff witness to
12 be sworn in.

13 HEARING OFFICER FAY: Please swear the
14 witness.

15 Whereupon,

16 CHRISTOPHER MEYER

17 was called as a witness herein, and after first
18 having been duly sworn, was examined and testified
19 as follows:

20 THE REPORTER: Please state and spell
21 your full name for the record.

22 THE WITNESS: Christopher Meyer;

23 C-h-r-i-s-t-o-p-h-e-r M-e-y-e-r.

24 //

25 //

1 DIRECT EXAMINATION

2 BY MS. DeCARLO:

3 Q Mr. Meyer, did you prepare the testimony
4 titled, Alternatives, in the final staff
5 assessment, exhibit 200?

6 A Yes, I did.

7 Q Was a statement of your qualifications
8 attached to this testimony?

9 A Yes, it was.

10 Q Do the opinions contained in the
11 testimony you are sponsoring represent your best
12 professional judgment?

13 A Yes, they do.

14 Q Can you please briefly describe how you
15 conducted your alternatives analysis for the
16 Avenal Energy project.

17 A Yes. To start my analysis for
18 alternatives to the project I basically read the
19 objectives of the project. And in great detail,
20 the project description. The mechanical
21 equipment, and also get an understanding through
22 discussions with staff what equipment is specific
23 to the environment, and what would change if the
24 project were moved to another site.

25 And so after looking at that, I talk to

1 all the staff; get a very clear idea early in the
2 project. And I'm constantly, throughout the
3 project, updating the idea of what are potential
4 issues to help me focus on either alternative
5 technologies, on alternative sites.

6 And using that information the issues
7 identification report, initial source scoping
8 comments from the public, identifying concerns.
9 Then I go out and I look at alternative sites,
10 alternative technologies.

11 And on this project initially it didn't
12 look like there were going to be any significant
13 environmental impacts. But we wanted to look at
14 land use issues, as well. So that's where I
15 focused my alternatives analysis.

16 Q And can you please describe the range of
17 alternatives you looked at?

18 A Yes. Initially staff looked at the
19 alternative proposed by the applicant in their
20 AFC. They proposed two sites. We looked at those
21 as site alternatives.

22 In working with our biological staff we
23 also identified initially in the project that
24 there were some biological concerns with just a
25 portion of the site. So staff, in the preliminary

1 staff assessment, looked at a slight modification
2 of the layout of the existing, the proposed
3 project by the applicant as an alternative.

4 And then staff went on to look at
5 alternative technologies such as wind, solar,
6 biomass. We also looked at all technologies. We
7 looked at both photovoltaic, as well as solar-
8 thermal.

9 And also staff looked at sites outside
10 of the area.

11 Q Did you limit your analysis of viable
12 alternatives only to facilities with a 600-
13 megawatt capacity?

14 A No. In response to comments received on
15 the preliminary document, staff looked at a 300
16 megawatt alternative that can be found in staff's
17 final staff assessment.

18 Q Can you please explain why you concluded
19 that a solar facility was not a viable alternative
20 to this project?

21 A Yes. The Energy Commission has a long
22 history of looking at solar projects as
23 alternatives based on different potential impacts
24 of land use per megawatt.

25 I used a very idealistic megawatt-per-

1 acre, or acre -- this situation looking at five
2 acres per megawatt for some of these technologies.
3 Even though some of the current projects that I'm
4 working on are looking at up to ten acres per
5 megawatt.

6 So even looking at, you know, an ideal
7 situation with a lot of sun, a lot of wind, my
8 analysis came up that the land use impacts in an
9 agricultural area with very significant concerns
10 over the loss of very large areas of either
11 Williamson Act land or high quality farmland was
12 potentially a significant impact.

13 Q And can you please explain why you
14 concluded that a wind facility was not a viable
15 alternative to this project?

16 A Similarly the acreage required and the
17 fact that being a less-than-ideal area for wind
18 would significantly increase the amount of acreage
19 required to get any significant amount of wind
20 energy.

21 And the fact that the areas within the
22 greater project area that would have even moderate
23 conditions would not only offer a significant view
24 issue, being on the ridge line; those also tend to
25 be the areas that were most susceptible to

1 significant biological impacts to listed and
2 common species.

3 Q Can you please explain why you concluded
4 that the Morro Creek site was ultimately not a
5 viable alternative to this project?

6 A The Morro Creek site, which was looked
7 at in an earlier Energy Commission project, had
8 some benefits over the project due to being
9 outside of the impacted air basin. But the area
10 had grown up to the point where there were
11 significant both sensitive receptors and just
12 residences in the area.

13 So the project had potential for having
14 more impacts on a populous area.

15 Q And can you please describe your
16 analysis concerning the no-project alternative?

17 A Yes. Staff looked at the no-project
18 alternative and backing up a little bit, one of
19 the things, as I said before, I'm in consultation
20 with all of the technical areas. As not being a
21 technical expert, I get a lot of feedback from
22 everyone from air quality, biology, soil and
23 water.

24 And in talking with both staff and
25 managers of other projects, looking at the growth

1 in California, and the no-project alternative --
2 basically a no-project alternative wouldn't
3 address the constant growth of demand in
4 California. And that if this project wasn't
5 built, another project would possibly have to be
6 built to replace the demand for energy in this
7 area.

8 Q And was that conclusion also based on
9 staff's, in the greenhouse gas analysis,
10 determination that the project would help reduce
11 the GHG emissions from the grid?

12 A Yes. The analysis in the air quality
13 and greenhouse gas have a very great deal to do
14 with the conclusion that a no-project alternative
15 would not, you know, be preferable to the project
16 as proposed.

17 Q Thank you.

18 MS. DeCARLO: At this time if we can
19 move the alternative section, section 6 of the
20 exhibit 200, into the record.

21 HEARING OFFICER FAY: Any objection?

22 MS. LUCKHARDT: No objection.

23 HEARING OFFICER FAY: All right. That
24 will be entered in the record at this point.

25 And Mr. Meyers is available for cross-

1 examination?

2 MS. DeCARLO: Yes.

3 HEARING OFFICER FAY: Any questions from
4 the applicant?

5 MS. LUCKHARDT: No questions.

6 HEARING OFFICER FAY: Okay. I have, and
7 I've double-checked my notes, I have CRPE has
8 requested 15 minutes for cross. And I have no
9 request from Mr. Simpson. Is that correct or do
10 you have something else?

11 MR. SIMPSON: I would have thought this
12 would have been what I wanted to talk about at the
13 prehearing conference.

14 HEARING OFFICER FAY: Well, that's not
15 what is important. It's what you said at the
16 prehearing conference, and what you reserved time
17 for.

18 MR. SIMPSON: Yeah. I believe I asked
19 for this conversation at the prehearing
20 conference. And I thought I asked for it again
21 when I gave up some time on the last couple
22 issues.

23 HEARING OFFICER FAY: How many questions
24 do you have?

25 MR. SIMPSON: How about seven.

1 HEARING OFFICER FAY: Well, we're over
2 time, and it would help us to finish tonight, help
3 a lot of people.

4 So we'll go with CRPE first, and see.
5 Perhaps you can shorten your list a little bit.

6 MR. SIMPSON: Maybe she'll ask --

7 MS. BROSTROM: Okay.

8 CROSS-EXAMINATION

9 BY MS. BROSTROM:

10 Q First of all, in looking at the basic
11 objectives of the project, the fourth one is
12 develop a site consistent with community planning
13 and existing zoning at a location that is
14 supported by the local community.

15 How have you measured support from the
16 local community?

17 A That was looking at both this case and
18 the previous Avenal Energy in the fact that the
19 city has zoned this as heavy industrial. One of
20 the major things that the Energy Commission looks
21 at is zoning for a project. That was dealt with
22 extensively in the land use section of the FSA and
23 the PSA.

24 So, having a local jurisdiction
25 municipality specifically zone a project or zone

1 an area for a project, or to specifically allow a
2 project site as a power plant, is seen as a
3 significant sign by Energy Commission Staff that
4 there is support.

5 And also in the initial informational
6 hearing and subsequent staff workshops members of
7 the city had expressed support. The elected
8 officials of the area had expressed support of the
9 project at that site, consistent with their
10 zoning.

11 Q And you would agree, though, that the
12 language is supported by the local community, not
13 supported by elected officials, correct.

14 A The language community planning and
15 existing zoning. It doesn't say the community.
16 Well, -- yeah, you said supported by the local
17 community, yes, that is the second portion.

18 Q If there was considerable community
19 opposition to this project, how would this change
20 your analysis, given this is one of the project
21 objectives?

22 A Basically that might have a small impact
23 on it, because it would basically be a weighing
24 aspect if I get 100 comments for, 100 comments
25 against. You know, that would be something that

1 would probably be more of a weighting decision by
2 the decisionmakers.

3 But in this case you'll note that the
4 public comments that we received on this did cause
5 staff to start looking at alternatives outside the
6 area. So that was the impetus for the examination
7 of the Morro Bay site and a smaller one was the
8 fact that there were concerns brought up in the
9 PSA workshop.

10 Q Okay. In terms of dismissing solar as a
11 feasible alternative, 600 megawatts or -- there
12 are no size requirements in the objective of the
13 project, is that correct?

14 A This project -- in many of the cases,
15 actually most that I've dealt with, the applicant
16 puts the megawatts in the objectives. This one
17 they didn't.

18 If you look at one of the original, in
19 the PSA, you know, actually staff did put megawatt
20 size in there because we recognized that it was
21 left out of there.

22 And the application that was put before
23 the Commission, the project description, did
24 identify that the applicant wished to seek a
25 permit for a 600 megawatt natural gas-fired power

1 plant.

2 The fact that they didn't put it
3 specifically in the objectives doesn't change the
4 fact that this proceeding was to analyze the
5 potential impacts of 600 megawatts. So that was
6 the metric that I used in my analysis.

7 We did, as I discussed before, look at a
8 smaller alternative, a 300 megawatt, which was
9 basically just removing one of the gas turbines
10 and using an appropriately sized steam turbine.

11 Q The reason why you rejected solar, you
12 said, was the large land use that would be
13 required for that facility.

14 Are you aware that the high salinity of
15 lands in this area make much of this land
16 unsuitable for agriculture uses?

17 A If there's land that has been identified
18 in this area that is no longer viable for any type
19 of farming, or any type of other use, and is
20 available for commercial development, then, you
21 know, that kind of land would be potential for
22 development. If it hasn't gone fallowed yet.

23 Because if you have areas of land that
24 have a high salinity, that are no longer being
25 farmed, that does not necessarily mean that they

1 have not gone fallow and now provide nesting,
2 breeding habitat for listed and common species.
3 Whereas, the land around them that does not have
4 those issues, that's constantly being farmed, the
5 farming activities could actually present a danger
6 to those species.

7 So that land, if left fallow, could
8 actually be an attractive use to -- for species.

9 Q Is that analysis that you just described
10 to me, does that appear in the FSA?

11 A No. That's something that's just from
12 my professional experience.

13 Q Are you aware that a lot of the concern
14 surrounding this power plant is impacts to air
15 quality?

16 A Yes. And that, I think, was dealt with
17 extensively this morning. So, yes, I -- and I've
18 talked with air quality staff throughout the
19 process.

20 Q Yet, isn't it true that you did not
21 consider alternatives that would lower air quality
22 impacts?

23 A The basic premise of looking at an
24 alternatives analysis is to reduce significant
25 impacts or to look at an alternative that reduces

1 significant impacts identified in a project.

2 So, if the biological staff, air quality
3 staff, land use, any of them identify in their
4 analysis a significant impact, whether it's to
5 public health, to air quality, anything, then my
6 analysis will focus on finding either a
7 technological or a site alternative to less that.

8 And as was testified earlier, those
9 significant impacts were not identified in those
10 sections as being unmitigated.

11 Q So, again, if the CEC decisionmakers
12 disagree that there are no local air impacts,
13 there has not been any alternatives put forth that
14 would reduce air impacts, whether --

15 A Actually, no. If you look at my
16 analysis, despite the fact that there was not a
17 significant impact identified by staff, in
18 response to your comments on the preliminary staff
19 assessment I analyzed the Morro Bay site to look
20 at an air district and air basin that was still
21 not in attainment, but it was not extreme
22 nonattainment.

23 Q And this option was rejected why?

24 A In that area there were community
25 issues. But also that -- I'm sorry, that was the

1 Morro Bay site.

2 There was also the San Ardo Oilfields,
3 which is still in an air basin that has
4 nonattainment issues. That one, it was a much
5 closer balancing test. It was in an oilfield.
6 There were site control issues, as far as the
7 unknown ability of the applicant to attain access
8 to the parcels.

9 There was -- water was a significant
10 issue. In my analysis I discovered, from looking
11 at the existing smaller power plants, that water
12 was a significant problem, as far as finding
13 water. And a power plant of this nature, of this
14 size, needs more water than the existing very
15 small facilities onsite. So that was a concern.

16 Also the transmission line that would be
17 necessary from the San Ardo fields to the
18 California backbone would have been both an
19 environmental and economic impact. It could have
20 been significant, because of the distance and the
21 undisturbed nature of the right-of-way required
22 for that linear facility.

23 MS. BROSTROM: That's all I have.

24 HEARING OFFICER FAY: Okay. Mr.

25 Simpson.

1 MR. SIMPSON: Thank you.

2 CROSS-EXAMINATION

3 BY MR. SIMPSON:

4 Q You mentioned the Williamson Act. Is it
5 your contention that this -- a solar facility you
6 would have to take the property out of the
7 Williamson Act to develop?

8 A No. My contention is that if the land
9 is in Williamson Act, --

10 Q Yes.

11 A -- then it would be potentially a
12 significant impact if the replacement of -- if an
13 alternative to this project was Williamson Act
14 land or private farmland, it could be a
15 significant impact; the loss of that to
16 agriculture.

17 Q I see. Would you consider this use a
18 more objectionable use than the adjoining uses,
19 the land uses there?

20 A As in the --

21 HEARING OFFICER FAY: This use meaning
22 which --

23 MR. SIMPSON: The use of this land for
24 this facility is -- the use of this land for a
25 power plant a more objectionable use than

1 farmland.

2 THE WITNESS: I'm not really sure how
3 that's relevant to my analysis. Objectionable as
4 in. That seems more opinion rather than -- are
5 you talking about as in environmental impacts,
6 impacts to something I analyzed, or -- because my
7 understanding is that the entire surrounding area
8 has been zoned for heavy industry.

9 And that this project was deemed by the
10 city as necessary for the development of that as
11 an industrial park. So whereas it is agricultural
12 now, the intent in the future was to develop this
13 area.

14 BY MR. SIMPSON:

15 Q I see. So it wasn't rezoned just for
16 the power plant? You expect other industrial
17 uses?

18 A No, the rezoning happened, I think, in
19 1992. And at that point I'm not sure if the
20 original Avenal Power Plant, that was a case, you
21 know, years ago, that the Commission was even on
22 the drawing board.

23 But my understanding, at least, and I'm
24 not a hundred percent sure of this, is that the
25 rezoning came before there was any application

1 before the Energy Commission for a project.

2 Q You mentioned in the applicant's project
3 description their intent was to build a natural
4 gas facility?

5 A Yes.

6 Q You're aware of the Chula Vista
7 decision?

8 A I'm actually the project manager of the
9 Chula Vista Energy Upgrade project before the
10 Commission, so I am intimately familiar with the
11 entire case.

12 Q Given the insight that you've gleaned
13 from the Commission's decision on Chula Vista, and
14 the inadequate alternatives analysis, do you feel
15 that your analysis in this project is --

16 A Yes. The alternatives analysis for
17 Chula Vista, as you read it, primarily had to do
18 with land use. And the primary issue there was
19 that the zone, it was light industrial.

20 And the decisionmakers determined that
21 the light industrial nature of that site and the
22 ambiguity in the zoning regulation sort of was a
23 difference between the general plan and the zoning
24 ordinances, led to an issue that then -- that
25 decision, that tied into their issue with the

1 alternatives.

2 In this case, since the zoning is heavy
3 industry, which is, if you read the decision from
4 Chula Vista, is what the siting committee
5 determined was the appropriate zoning for a
6 facility such as this project. That would sort of
7 negate that concern.

8 Q Are there some crops that would grow in
9 shade?

10 A I'm not a specialist on agriculture.

11 Q Okay.

12 A If you saw my garden you'd understand
13 I'm really not the person to ask on this.

14 Q The project's adjacent to the California
15 Aqueduct. I understand that the evaporation is a
16 major loss of water for the aqueduct.

17 If a solar facility was built along the
18 aqueduct that provided some shade to the aqueduct,
19 reduced the evaporation, it wouldn't use excess,
20 they wouldn't take any land out of circulation,
21 would it?

22 A That would be something that, you know,
23 could be looked at with the Bureau of Reclamation.
24 That becomes a very complex site control issue
25 with the Bureau of Reclamation, gaining access to

1 the aqueduct and the development of a project that
2 would not interfere with that. But that's really,
3 that's outside my area of expertise.

4 Q I see. So if a solar facility was
5 developed that used several thousand acres, but it
6 was high enough that you could still grow crops
7 underneath, wouldn't that land still be usable?

8 MS. LUCKHARDT: I have to object. That
9 calls for speculation as to whether --

10 THE WITNESS: Yeah, that's --

11 HEARING OFFICER FAY: Yeah, that's
12 sustained.

13 MS. LUCKHARDT: -- a crop could actually
14 grow --

15 HEARING OFFICER FAY: That's remarkable
16 speculation. I'm not sure Mr. Meyers is qualified
17 to reach those heights.

18 THE WITNESS: I'm sure that I'm not.

19 (Laughter.)

20 MR. SIMPSON: No further questions.

21 HEARING OFFICER FAY: Okay. Thank you.

22 Any redirect?

23 MS. DeCARLO: Yes, one question.

24 //

25 //

1 REDIRECT EXAMINATION

2 BY MS. DeCARLO:

3 Q With regard to the analysis of
4 alternatives that could avoid an air quality
5 impact, you looked at solar and wind facilities,
6 isn't that correct?

7 A That's correct.

8 Q And in your opinion would those
9 facilities, if they were viable, avoid an air
10 impact, significant air impact?

11 A Yes, they would.

12 Q And in your analysis did you find that,
13 for other reasons, these types of facilities were
14 not viable alternatives to this project?

15 A Yes, that's correct.

16 MS. DeCARLO: No further questions.

17 MR. SIMPSON: I'll cross on that.

18 HEARING OFFICER FAY: Recross just on
19 that?

20 MR. SIMPSON: Yes, recross.

21 HEARING OFFICER FAY: Okay.

22 RECROSS-EXAMINATION

23 BY MR. SIMPSON:

24 Q What other reasons is solar not viable
25 because AB-32 --

1 A The exact reasons that we just
2 discussed. Primarily biological and agricultural
3 land use impacts.

4 Q I see. So if the solar was developed on
5 rooftops in Fresno, then that would mitigate that
6 impact?

7 A Yeah, if they -- I mean there's, if
8 you're following Energy Commission policy issues,
9 the complexity of rooftop solar is beyond my
10 expertise.

11 But, yeah, if they were able to develop
12 600 megawatts of rooftop solar and get that to the
13 grid, you know, that would alleviate a lot of --
14 it would basically eliminate the environmental and
15 biological concerns related to the development of
16 large-scale solar.

17 Q And if it was developed over the
18 aqueduct, would that mitigate that same effect?

19 HEARING OFFICER FAY: Well, that's
20 already been excluded. That was objected to --
21 I'm sorry, I'm sorry, go ahead. My mistake. It
22 was a slightly different question.

23 THE WITNESS: Basically the generality
24 of your question is the development of solar, be
25 it thermal-solar, photovoltaic, whatever, any

1 renewable for that matter, in a highly disturbed
2 environment, would, you know, alleviate the
3 impacts to, you know, direct impacts to biology
4 and agriculture.

5 And there's always, you know, you're
6 going to have some impacts on let's say wind, to
7 birds, even if you put wind in a disturbed
8 environment, if it's a flyway you're going to
9 have, you know, bird mortality potentials.

10 You're also going to have visual
11 impacts. And also from large-scale solar-thermal
12 you have the potential for visual impacts, whether
13 it's undisturbed or disturbed.

14 MR. SIMPSON: Thank you.

15 HEARING OFFICER FAY: Nothing further?

16 MR. SIMPSON: No, sir.

17 MS. DeCARLO: One recross -- or
18 redirect, sorry.

19 FURTHER REDIRECT EXAMINATION

20 BY MS. DeCARLO:

21 Q Do you have any opinion on whether or
22 not you believe rooftop solar would meet the
23 objectives specified by the project applicant in
24 this proceeding?

25 A It wouldn't meet the objectives of the

1 applicant solely from the fact the applicant
2 doesn't have the ability to implement such a
3 project.

4 MS. DeCARLO: Thank you --

5 HEARING OFFICER FAY: Would not? You
6 testimony is it would not meet the objectives?

7 THE WITNESS: It would not.

8 HEARING OFFICER FAY: Okay. All right,
9 I believe that concludes the testimony on
10 alternatives.

11 And the only thing remaining that there
12 was any request for cross-examination was soil and
13 water resources. Mr. Simpson, will you have
14 questions on that?

15 MR. SIMPSON: I'm sorry?

16 HEARING OFFICER FAY: Soil and water
17 resources, do you still have some cross-
18 examination on that?

19 MR. SIMPSON: Yeah, but --

20 HEARING OFFICER FAY: And of who -- this
21 is up for the staff, correct? Because you've
22 already --

23 MR. SIMPSON: Same person?

24 HEARING OFFICER FAY: I don't believe
25 so.

1 MS. DeCARLO: No, I'm sorry. We could
2 not get our soil and water analyst here. He
3 already had a prescheduled vacation.

4 However, it's my understanding from Mr.
5 Simpson's statements at the prehearing conference
6 that the issue of soil and water was really
7 limited to this issue of whether the project was
8 in compliance with LORS.

9 And so we have Joe Douglas available to
10 talk about the proposed water use in a brief
11 format, and whether or not it complies with the
12 Energy Commission's policy on LORS.

13 HEARING OFFICER FAY: Okay, let's try to
14 do that then.

15 Now, I think before we get too much off
16 base we ought to have the applicant introduce
17 their testimony on alternatives by declaration so
18 we have some organization to this record.

19 Do you want to go ahead, Ms. Luckhardt,
20 identify exhibits and --

21 MS. LUCKHARDT: Okay. Our testimony on
22 alternatives that has been previously filed and
23 submitted includes section 5 of exhibit 1, and
24 exhibit 21(m) and exhibit 25(b). And we would ask
25 that those be entered into the record by

1 declaration at this time.

2 HEARING OFFICER FAY: Is there
3 objection? I hear none. So entered.

4 All right, and now we'll move to the
5 staff testimony on soil and water resources. You
6 can dispense with any summary.

7 MS. DeCARLO: Okay.

8 HEARING OFFICER FAY: Introduce it on
9 declaration and we'll make the witness available
10 for cross.

11 MS. DeCARLO: Okay. So we'll enter the
12 soil and water testimony by declaration of Casey
13 Weaver. And that's soil and water section 4.9 of
14 exhibit 200, and his declaration is included in
15 the final staff assessment.

16 HEARING OFFICER FAY: Any objection?
17 All right, that will be entered at this point.

18 MR. SIMPSON: Can I submit questions to
19 the person who wrote the document, maybe, in
20 writing?

21 HEARING OFFICER FAY: No, this is your
22 opportunity to cross-examine the person that the
23 staff has made available.

24 MR. SIMPSON: I see.

25 HEARING OFFICER FAY: You said you had

1 questions --

2 MR. SIMPSON: And I do, but my ride is
3 leaving.

4 MS. BROSTROM: Will you give your time
5 to me?

6 MR. SIMPSON: I'd like to cede my time
7 to --

8 HEARING OFFICER FAY: All right. Your
9 witness is available?

10 MS. DeCARLO: He's already been sworn
11 in. Yes.
12 Whereupon,

13 JOSEPH DOUGLAS
14 was recalled as a witness herein, and having been
15 previously duly sworn, was examined and testified
16 further as follows:

17 HEARING OFFICER FAY: The project
18 manager is available.

19 MS. DeCARLO: He's available for
20 questions.

21 HEARING OFFICER FAY: Okay. Why don't
22 you go ahead.

23 MR. DOUGLAS: To the best of my ability.

24 //

25 //

1 CROSS-EXAMINATION

2 BY MS. BROSTROM:

3 Q Two questions. Isn't it the CEC policy
4 not to use potable water or fresh water?

5 A I'm not sure exactly the policy. I know
6 that what I've talked and discussed in
7 consultation with Casey in this, that it complies
8 with all LORS, and the fact that it uses dry
9 cooling as well as zero liquid discharge.

10 Q Does this project use 200 acrefeet?

11 A I believe, once again from my
12 discussions with him, the total possible rate, and
13 he indicated it was not for an extended period of
14 time, I believe it was 104.

15 Q Has the CEC conducted a water assessment
16 pursuant to Water Code 10910?

17 A That I don't know.

18 Q Are you aware of requirements from Water
19 Code 10910?

20 A Not specifically.

21 MS. BROSTROM: Thank you.

22 HEARING OFFICER FAY: All right.

23 MS. LUCKHARDT: Do you want us --

24 HEARING OFFICER FAY: You have an
25 opportunity to cross-examine the witnesses, and we

1 do not have the expert available here. Will you
2 return tomorrow and we will bring that expert
3 down?

4 MS. BROSTROM: I'd like -

5 HEARING OFFICER FAY: You have to speak
6 into the microphone.

7 MS. LUCKHARDT: Unless you'd like to ask
8 your questions of our witnesses.

9 HEARING OFFICER FAY: Well, first I want
10 to get an answer to this question.

11 MS. BROSTROM: I will not be here
12 tomorrow.

13 HEARING OFFICER FAY: Okay. Would you
14 like, after Ms. Luckhardt introduces her testimony
15 on soil and water, would you like to ask the
16 available people from the applicant?

17 MS. BROSTROM: Yes, I'd be asking the
18 same questions. Yes.

19 HEARING OFFICER FAY: Okay. Anything
20 further, Ms. DeCarlo?

21 MS. DeCARLO: Yes, just one redirect.

22 REDIRECT EXAMINATION

23 BY MS. DeCARLO:

24 Q Mr. Douglas, can I direct you to page
25 4.9-3 of staff's water analysis. Can you please

1 read the discussion regarding the 2003 IEPR and
2 what it states regarding the state's water policy?

3 A In the 2003 IEPR consistent with State
4 Water Resources Control Board policy 75-53 in the
5 Warren Alquist Act, the Energy Commission
6 reiterated the state water policy, stating the
7 Commission will approve the use of fresh water for
8 cooling purposes by power plants only where
9 alternative water supply sources and alternative
10 cooling technologies are shown to be
11 environmentally undesirable or economically
12 unsound.

13 Q And has the applicant proposed to use an
14 alternative cooling technology in this proceeding?

15 A Yes.

16 Q And what would that technology be?

17 A Dry cooling.

18 Q And are they also proposing to use ZLD?

19 A Correct.

20 Q And is this the basis for staff's
21 determination that the project is in conformance
22 with state water policy?

23 A Yes.

24 Q And is this consistent with staff's
25 conclusions where, in other similar projects where

1 applicants have proposed these same technologies?

2 A Yes.

3 MS. DeCARLO: Okay.

4 PRESIDING MEMBER BYRON: Mr. Fay.

5 HEARING OFFICER FAY: Anything further?

6 PRESIDING MEMBER BYRON: Mr. Fay.

7 MS. BROSTROM: A followup.

8 HEARING OFFICER FAY: Oh, excuse me.

9 PRESIDING MEMBER BYRON: What is Water
10 Code 1010 (sic)?

11 MS. BROSTROM: 10910 is a part of CEQA
12 that requires a water assessment for projects that
13 use large quantities of water. And so it's now an
14 additional part of a CEQA compliance.

15 And it requires that the water agencies,
16 you know, develop a water assessment report
17 indicating where the water will be coming from,
18 you know, what uses will not be able to be used.

19 PRESIDING MEMBER BYRON: And when was it
20 implemented?

21 MS. BROSTROM: It was a couple years
22 ago.

23 MS. LUCKHARDT: Can you repeat that code
24 section, we're trying to look it up.

25 MR. STENGER: Was that Water Code?

1 MS. BROSTROM: California Water Code
2 10910.

3 MS. LUCKHARDT: I'm wondering if that's
4 the one that is applicable to residential
5 development?

6 MS. BROSTROM: It is applicable to
7 residential. It also is applicable to projects
8 that are over 40 acres. And it also is applicable
9 to projects that use a compensable or a similar
10 amount of water as the residential.

11 MR. STENGER: I'm looking at the Office
12 of Administrative Law website here. And Water
13 Code section 109 consists of (a) and (b), and then
14 goes on to section 112.

15 HEARING OFFICER FAY: Did you say 10910,
16 or 109-point-10?

17 MS. BROSTROM: 19010. 19010, and also
18 look at 10912.

19 MS. LUCKHARDT: 109-point-10?

20 MR. STENGER: 10912 has to do with
21 reverse osmosis water treatment systems.

22 MS. BROSTROM: No, that's not it.

23 MR. STENGER: This is the water code,
24 this is the California Water Code.

25 MS. BROSTROM: California Water Code

1 10910.

2 HEARING OFFICER FAY: Okay. Well,
3 that's subject to check. It is what it is. Did
4 you have any --

5 MS. BROSTROM: Yeah. I forgot right
6 now, but --

7 RECROSS-EXAMINATION

8 BY MS. BROSTROM:

9 Q I basically was asking you to define it
10 was an acronym, it was a three-letter acronym.

11 PRESIDING MEMBER BYRON: Zero discharge.

12 MS. DeCARLO: ZLD.

13 THE WITNESS: Zero liquid discharge.

14 BY MS. BROSTROM:

15 Q Okay. Was the use of reclaimed water
16 analyzed?

17 A I'm not sure.

18 MS. BROSTROM: Okay, thank you.

19 HEARING OFFICER FAY: Anything further?

20 Okay.

21 MS. LUCKHARDT: Do you have any
22 questions for our witness, or did you get your
23 answers?

24 MS. BROSTROM: I was basically going to
25 ask about 10910.

1 MS. LUCKHARDT: We're trying to pull up
2 10910.

3 MR. STENGER: Yeah, the OAL website
4 doesn't have a 10910.

5 MS. DeCARLO: I can tell you, this is
6 not testimony, but it is our policy to analyze the
7 water use of a project in accordance with the
8 newly established requirements, 10910, or whatever
9 the actual number is, the subject matter that you
10 identified. That as far as the legal office is
11 concerned, that is our policy to insure that the
12 water analysis includes a conformance with that
13 provision.

14 HEARING OFFICER FAY: But that was not
15 listed as one of the LORS --

16 MS. DeCARLO: I don't know that -- I
17 mean apparently this number isn't found. It could
18 be another one of the numbers that we've
19 identified in our LORS table. I don't know the
20 specific number of that provision.

21 HEARING OFFICER FAY: So nothing
22 further, then, on soil and water?

23 MS. BROSTROM: Nothing further.

24 HEARING OFFICER FAY: Okay. All right,
25 Ms. Luckhardt, I think the serve goes to you,

1 introducing your testimony on soil and water.

2 MS. LUCKHARDT: Okay. And so is that,
3 and so do you -- you do have a question, so I
4 should --

5 HEARING OFFICER FAY: No. She said no
6 more questions.

7 MS. LUCKHARDT: Okay. All right, then,
8 it would just be coming in by declaration then.
9 The applicant, at this point, would move from
10 exhibit 1 section 6.4, section 6.5, appendix 6.5-
11 1.1, 6.5-1.2, appendix 6.5-2, appendix 6.5-3,
12 exhibit 3(f), exhibit 3(n), exhibit 3(o), exhibit
13 3(p), exhibit 3(q), exhibit 3(r), exhibit 3(s),
14 exhibit 3(t), exhibit 6(b), exhibit 7(f), exhibit
15 14(d), exhibit 17(f) and exhibit 19(c), exhibit
16 21(g), exhibit 25(k), exhibit 56 and exhibit 59.

17 HEARING OFFICER FAY: Is there
18 objection?

19 MS. DeCARLO: No.

20 HEARING OFFICER FAY: Okay. Are you
21 moving those all in --

22 MS. LUCKHARDT: All in by declaration.

23 HEARING OFFICER FAY: All right. I
24 assume, hearing no objections, then we will enter
25 those at this point in the record.

1 And there's no further cross-examination
2 on soil and water.

3 So what I would propose is that we --
4 what we have left, this only applies to staff,
5 general conditions, compliance monitoring and the
6 facility.

7 And we have both parties identified
8 testimony on facility design entered by
9 declaration. Power plant efficiency, power plant
10 reliability, transmission system engineering,
11 transmission line safety and nuisance, cultural
12 resources, geology and paleontology, waste
13 management, land use, noise and vibration,
14 socioeconomic resources, traffic and
15 transportation and visual resources.

16 What I'd like the parties to consider is
17 whether the testimony and exhibits, declarations
18 identified for those areas on the part of the
19 staff and applicant, can be moved in at this
20 point. Or if there's any objection to doing that.

21 I think it would be a shorthand way, and
22 I think we already have in the written record what
23 we need to identify all those.

24 MS. LUCKHARDT: Yes, we do.

25 MS. DeCARLO: Um-hum.

1 HEARING OFFICER FAY: Okay. I see --

2 MS. LUCKHARDT: We have no objection.

3 HEARING OFFICER FAY: Ms. Luckhardt has
4 no objection.

5 MS. DeCARLO: Staff has no objection.

6 HEARING OFFICER FAY: Staff has no
7 objection. Do you raise any objection, Ms.
8 Brostrom?

9 MS. BROSTROM: No.

10 HEARING OFFICER FAY: Okay. So there's
11 no objection. We will, at this point, receive the
12 testimony of all those areas I listed as the
13 testimony, declarations and exhibits as previously
14 submitted in writing. And those are received into
15 the record at this point.

16 MS. LUCKHARDT: And, Mr. Fay, I realize
17 that I inadvertently left off the appendices from
18 the AFC when I was listing the biological
19 resources exhibits. So provided that no party has
20 an objection I would like to also move in appendix
21 6.6-1, appendix 6.6-2, appendix 6.6-3, appendix
22 6.6-4, and appendix 6.5-1 of exhibit 1. All have
23 to do with biological resources.

24 HEARING OFFICER FAY: Okay. Ms.
25 Brostrom, do you have any objection? She

1 indicates no objections.

2 (Laughter.)

3 HEARING OFFICER FAY: Just one last
4 point. I know it's late, but we've had different
5 expressions on briefing.

6 The applicant recommends briefs, opening
7 brief July 21st, reply July 28. Staff recommends
8 opening August 12th, reply August 21st. And Mr.
9 Simpson just said he's unavailable the first two
10 weeks of August. We have nothing from CRPE.

11 My recommendation is that we go with the
12 staff's suggestion. I think it gives the most
13 accommodation to various parties. And I don't
14 believe it will affect the schedule on issuing the
15 PMPD.

16 So, is there any discussion on that
17 matter?

18 MS. DeCARLO: Only one new development.
19 I believe the 21st is a furlough day, and so we
20 would not be able to send --

21 HEARING OFFICER FAY: Right.

22 MS. DeCARLO: -- that out. So, --

23 HEARING OFFICER FAY: So the following
24 workday would be the --

25 MS. DeCARLO: Yeah, if that's amenable

1 to the other parties.

2 HEARING OFFICER FAY: So let's --

3 MS. LUCKHARDT: And so those dates again
4 are?

5 HEARING OFFICER FAY: Opening briefs due
6 August 12th, that's a Wednesday. And reply briefs
7 due August 24th, a Monday.

8 MS. LUCKHARDT: Are we sure that that's
9 not going to hold up the PMPD? That puts the PMPD
10 out almost two months.

11 MS. DeCARLO: Staff was willing to
12 propose an earlier date. I believe we informally
13 discussed that with the applicant. Of course,
14 this was before the furlough day.

15 So I believe we had indicated, let's
16 see, the last week of July, so the 31st for
17 opening briefs. That's not going to work?

18 MS. BROSTROM: I'm going to take the two
19 last weeks of July.

20 HEARING OFFICER FAY: You say?

21 MS. BROSTROM: The last two weeks of
22 July.

23 MS. DeCARLO: Perhaps August --

24 MS. BROSTROM: -- the 12th and the 24th.

25 HEARING OFFICER FAY: Well, it looks to

1 me like that accommodates most of the parties.
2 And I doubt that it will slow down the issuing of
3 the PMPD.

4 MS. DeCARLO: The 12th and the 24th?

5 HEARING OFFICER FAY: Yes.

6 MS. DeCARLO: Okay.

7 HEARING OFFICER FAY: Now that doesn't
8 mean that there's not other factors, you know,
9 that will affect that. But I don't think the
10 briefing schedule will.

11 MS. DeCARLO: And does the Committee
12 have any direction what they would like to see
13 briefed, or do you want us just to self-identify?

14 HEARING OFFICER FAY: At this point I
15 think that the briefs must address all the issues
16 that were put into contention by any of the
17 parties. And focus on those questions --

18 MS. DeCARLO: Okay. So, any items
19 raised at today's hearing?

20 HEARING OFFICER FAY: Right. Any
21 further thoughts on that, Ms. Luckhardt?

22 MS. LUCKHARDT: Well, just there were
23 quite a few subject areas where there were
24 questions and that gives me even more concern
25 about having the dates go out to the 12th and the

1 24th.

2 Although, you know, there were areas
3 where there was more discussion than others, there
4 are still quite a few subject areas that we went
5 over today in varying levels of detail.

6 Greenhouse gas, air quality, public
7 health, biological resources, hazardous materials,
8 worker safety, soil and water, alternatives.
9 That's nine, approximately nine subject areas,
10 eight or nine subject areas.

11 And that leads me to believe that, it
12 gives me great concern about having the briefing
13 deadlines go out over a month from now on that
14 many subject areas, and to believe that that won't
15 impact the timing on the PMPD.

16 MS. DeCARLO: Well, we will have to wait
17 probably 10 to 14 days for the transcripts to
18 begin briefing anyway. Fourteen days, so --

19 HEARING OFFICER FAY: I think 14 days,
20 yeah. Fourteen days to have access to the
21 transcripts.

22 And what was your offer on an earlier
23 time?

24 MS. DeCARLO: Well, my original offer
25 was --

1 HEARING OFFICER FAY: But that doesn't
2 work for Ms. Brostrom.

3 MS. DeCARLO: Right, but perhaps maybe
4 the end of the first week of August would be
5 feasible for her? That would be the 6th.

6 MS. BROSTROM: I think the amount --

7 THE REPORTER: Could you come to a
8 microphone, please?

9 HEARING OFFICER FAY: Yeah, we just
10 can't pick you up.

11 MS. BROSTROM: The amount of issues in
12 contention mitigate for more time rather than less
13 time to brief these issues. So if we're dealing
14 with nine issues, and we're not getting the
15 transcript for another two weeks, that doesn't
16 leave very much time to make those arguments.

17 HEARING OFFICER FAY: Let's go off the
18 record a second.

19 (Off the record.)

20 HEARING OFFICER FAY: Opening briefs are
21 due August 12th; reply briefs due August 24th.

22 Is there any closing matters, statements
23 that any of the parties would like to make at this
24 point?

25 MS. LUCKHARDT: The only closing matter

1 we have is it just gives us a lot of concern to
2 have the briefing schedule out this far, that
3 we're just going to continue to experience delays.

4 PRESIDING MEMBER BYRON: Ms. Luckhardt,
5 it gives me a lot of concern now that I have staff
6 that are working three days a month less than they
7 were at the beginning of this year. So they need
8 as much time. And one of the intervenors, who is
9 still here, has indicated they would prefer more
10 time.

11 And I agree with the argument that it
12 does take more time to address these issues, not
13 less. So I understand your concern. We will do
14 our best to get the PMPD out on time.

15 HEARING OFFICER FAY: All right. I see
16 no further indication of more input, so that
17 concludes our evidentiary hearings, and we are
18 adjourned.

19 (Whereupon, at 9:00 p.m., the
20 evidentiary hearing was adjourned.)

21 --oOo--

22

23

24

25

CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter,
do hereby certify that I am a disinterested person
herein; that I recorded the foregoing California
Energy Commission Hearing; that it was thereafter
transcribed into typewriting.

I further certify that I am not of
counsel or attorney for any of the parties to said
hearing, nor in any way interested in outcome of
said hearing.

IN WITNESS WHEREOF, I have hereunto set
my hand this 19th day of July, 2009.

PETER PETTY

AAERT CER**D-493

CERTIFICATE OF TRANSCRIBER

I certify that the foregoing is a correct
transcript, to the best of my ability, from the
electronic sound recording of the proceedings in
the above-entitled matter.

July 19, 2009

Margo D. Hewitt, CET**00480

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345